An Investigation of Student Collaborative Summary Writing
with Different Instructional Strategies

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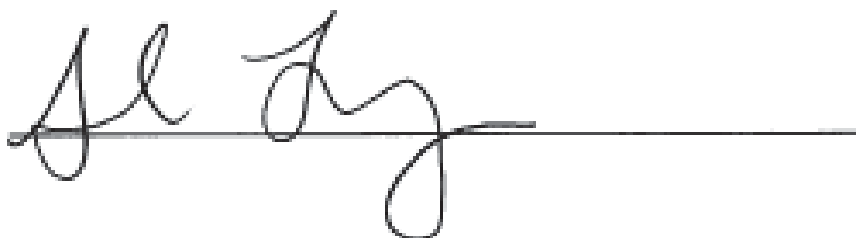Professor of Political Science

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ABSTRACT

The purpose of this study was to determine how collaborative practice utilizing different instructional strategies (Strategy A-*Collaborative Traditional*, Strategy B-*Collaborative GIST Summary Writing*, and Strategy C-*Collaborative GIST Summary Writing with Technology*) would affect students' individual performance on summary writing. The technology piece was dropped after Lesson One due to insufficient time for technology use and student frustration. Thus, Group C followed the same format as Group B. A mixed-methods explanatory design was utilized in this study. Students' overall scores and scores on each rubric element were collected and analyzed for individual pre-, mid-, and post-assessments to determine if there were any differences among groups. Student summaries, teacher journals, and teacher and student interviews were collected to examine factors affecting the differences in student assessment scores, and teacher and student perceptions about student performance on collaborative GIST summary writing. MANCOVA tests were used to analyze the quantitative data and content analyses were used to analyze the qualitative data. The findings showed that although no significant differences were found in the post-assessment scores between the collaborative traditional summarization group (A) and the collaborative GIST groups (B and C), there was still some evidence showing the effectiveness of the GIST strategy. The evidence included (a) a slight tendency toward significant differences in the post-assessment scores between Groups A and B, and Groups A and C, (b) Group C's post-assessment score was the highest, out-performed Groups A and B on almost every rubric element, (c) a significant difference between Groups A and B on paraphrasing, and (d) a slight tendency toward significant differences between Groups A and C on focus and

conventions. The pattern found in the content analysis of student summaries also supported the quantitative results. Although the GIST strategy had a positive impact on collaborative summary writing (e.g., helping students build on prior knowledge and improve their scores on summary writing), the following issues had to be addressed to help students use it: a) giving more time to complete the lessons, b) increasing student interests in the texts, c) increasing the GIST word limit, and d) offering extra guidance or feedback strategy. The findings also showed that collaboration did have a positive impact on students' summary writing. Both teachers and students believed that collaborative summary practice was helpful. However, it might benefit low achievers more. In addition, technology used in this study did not really help with summary writing. Both teacher and students reported negative experiences with it. More time and extra guidance should be given when integrating technology into summary writing instructions.

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Chapter I

INTRODUCTION

In this chapter, I cover the problem with summary writing instruction today. I provide the theoretical framework of the study followed by the purpose of the study. Next, I list the research questions and define special terms. An overview of the methodology, significance of the study, and organization of this dissertation conclude this chapter.

Statement of the Problem

Academic writing is a crucial aspect of any educational experience (Colorado, 2008). With the implementation of the Common Core State Standards (CCSS), more emphasis than ever is being placed on written expression and writing in multiple content areas (Troia & Olinghouse, 2013). However, the expected writing skill level assumed by these rigorous standards is in some ways unrealistic as students often have below grade level reading and writing skills to the point that even literacy skills that seem basic in comparison to the CCSS are not adequately acquired (White, 2011). As a seventh-grade ELA teacher, I often have students come to me performing with below grade level reading and writing skills. Even the most basic skills, such as summary writing, are lacking at this point in students' education. Basic literacy skills are significant to students' ability to function academically and in their futures (White, 2011). Travis (2011) reported that a majority of participants considered information literacy skills to be important and useful in their workplaces, even to the point that they regarded those skills as instrumental in getting hired. Furthermore, Leung (2009) evaluated the link among

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Internet connectedness, information literacy, and quality of life to find that not only are the three connected, but particularly noteworthy for literacy educators is that information literacy was found to be a positive predictor of quality of life. Additionally, Culpepper's (2002) case study indicated that use of the internet had an overall positive impact on literacy instruction and development in an eighth grade classroom.

Before working on information literacy, common sense tells us that students must first obtain basic literacy skills. Summary writing is formed by the basis of the two cornerstones of literacy – reading comprehension and writing (Yuan ke & Hoey, 2014). Frey, Fisher, and Hernandez (2003) described summary writing as a method meant "to convey correct information in an efficient manner so that the reader can learn the main idea and essential details through a piece that is much shorter than the original" (p. 43). Thus, if a student's summary writing ability is lacking, other forms of reading response and writing activities will likely also be deficient. Similarly, because summary writing combines reading and writing, it can enhance both skills. Graham and Perin (2007) noted that summary writing is an effective writing instruction strategy, and Gao (2013) established the positive effect of summary writing on reading comprehension. However, the most commonly used method of teaching summary writing is teaching students to look for main ideas. The issue with this method is that students sometimes consider many details as important and thus, should be counted as main ideas, leading to a summary that is just as long as the original. Teachers and students need a more specific method for summary writing.

Theoretical Framework

An instructor may use multiple methods to teach summary writing. Some summarization strategies involve following a series of rules to create a summary, such as deleting unimportant information and choosing or creating a topic sentence. Brown and Day (1983) examined the ability of students of varying ages to follow *rules-based* summarization strategies, but discovered even advanced-age students had difficulty following some of the rules required by some summarization approaches such as inventing a topic sentence. Cunningham (1982) developed a summarization strategy he called Generating Interaction between Schemata and Text (GIST), which involves breaking a text down into paragraphs and having students provide a fifteen-word sentence that summarizes each paragraph. This strategy is particularly useful for teaching students to be concise rather than wordy when writing summaries. Because this study focuses on seventh-grade students, I decided that the GIST summary would be more readily understandable and easy to follow for the participants in this study.

Another aspect that would be more suitable for the age-group of the participants is the incorporation of technology (Saxena, 2013). Technology is inundating everything today – including education. Zheng, Warschauer, and Farkas (2013) ascertained that when planned carefully, the use of technology such as laptops and digital media can improve literacy processes and outcomes for a variety of students. Similarly, Hett (2012) discusses how technologies such as audiobooks and digital storytelling can enhance literacy curriculum. Recently, Web 2.0 tools such as wikis and blogs have been implemented and studied as platforms for teaching literacy skills. Research has already shown that such tools can increase audience awareness and student motivation to write

(Lapp, Shea, & Wolsey, 2011; Lenhart, Arafeh, Smith, & Macgill, 2008; Read 2006). Wikis contain several unique functions that allow editing by multiple users on a single page at the same time and display individual contributions to the page. These functions can allow students to learn and write collaboratively, leading to improvement in their writing skills. Shu and Yu-Hao (2012) determined that using wikis for face-to-face collaborative writing led to high levels of participation, quality, and satisfaction.

<div align="center">Purpose of the Study</div>

I examined the effect of different modes of instructional strategies – traditional and the GIST strategies – as well as the collaborative nature of technology on student performance when writing summaries. Three groups of participants based on different instructional strategies were established for this study. The collaborative traditional group completed the summaries in the manner traditionally taught. They had to find main ideas and hand-write the summary. Students collaborated in groups of 3-4. The collaborative GIST only students also hand-wrote summaries in groups of 3-4, but they utilized the GIST strategy for completing their summaries. Lastly, the collaborative GIST with technology group consisted of students collaborating via a class wiki to create summaries on a wiki page using the GIST strategy. I also sought to understand how these different modes of instructional strategies help student collaboration on summary writing. The student summaries were scored by using a rubric and coded to determine if patterns in length and quality of student summaries improved with each mode of instructional strategies. Next, teacher perceptions of students' collaboration and achievement on summaries were gathered to determine whether teachers perceive the varying mode of instructional strategies to be effective or harmful to students' summary

writing skills. Finally, students' perceptions of collaboration, technology, and achievement on summaries were gathered to determine whether students perceive collaboration, technology, and the strategies used to be helpful or harmful in summary writing.

Research Questions

I sought to answer the following research questions in three seventh-grade classrooms in rural Georgia:

Research Question 1. How is individual student performance on writing summaries impacted by different instructional strategies?

Research Question 2. What patterns emerge in length and quality of student summaries?

Research Question 3. What are seventh-grade teacher perceptions about student performance on collaborative GIST summary writing?

Research Question 4. What are seventh-grade student perceptions about their performance on collaborative GIST summary writing?

Research Question 5. What are seventh-grade teacher and student perceptions about collaborative GIST summary writing with technology?

Definition of Terms

Mode of Instructional Strategies. Using the traditional instructional strategy mode, students wrote summaries by finding main ideas and hand-writing a summary in groups of 3-4. The collaborative GIST only strategy included students using the GIST strategy for writing summaries, but they also hand-wrote summaries in groups of 3-4 like the first group. The third strategy, the collaborative GIST with technology group, consisted of

students collaborating via a class wiki to create summaries on a wiki page using the GIST strategy.

Summary Writing. Yuan ke and Hoey (2014) described summary writing as a task that "involves restating succinctly in one's own words the main points of the original" (p. 89).

GIST Summary Writing. GIST is an acronym which stands for Generating Interaction between Schemata and Text, a summarization strategy developed by James Cunningham in 1982. This method involves breaking a text down into paragraphs and having students provide a fifteen-word sentence that summarizes each paragraph (Cunningham, 1982).

Traditional Summary Writing. For the purpose of this study, this term refers to the method of having students locate what they believe to be main ideas in the text and paraphrasing those main ideas.

Wiki. This is a word of Hawaiian origin, but it describes a web page that "allows readers to collaborate with others in writing it and adding, editing, and changing the Web page's contents at any time" (Solomon & Schrum, 2007, pp. 57-58).

Collaborative Learning. This term refers to "an instruction method in which students at various performance levels work together in small groups toward a common goal" (Gokhale, 1995, p. 1). For this study, the terms *collaborative learning* and *cooperative learning* are considered equivalent and may be used interchangeably.

Technology-enhanced Instruction. This term is commonly used interchangeably with the term *technology-enhanced learning*, which is defined by the Higher Education Funding Council for England (HEFCE) as using technology to enhance both learning and teaching (HEFCE, 2009). In this study, the researcher attempted to use a wiki to enhance student performance on summary writing.

Methodology

Three groups were formed for the implementation of this study. Group A

consisted of students practicing a traditional form of summarization writing; they hand-

wrote a summary created from main ideas in the text. Group B contained students

following the GIST summarization method to hand-write summaries. Finally, students in

Group C followed the GIST strategy to create summaries, but rather than completing

them in the traditional format of pen-and-paper, students worked on a class wiki to create

and post their summaries. This study followed a mixed-methods design, a methodology

in which both qualitative and quantitative data were collected and analyzed in addition to

being linked by having one build on or embedded in the other (Creswell & Clark, 2007).

I sought to answer five questions, and a mixed-methods design was appropriate because

qualitative data gathered for Questions 2, 3, 4 and 5 helped to explain the findings for

Research Question 1. To answer Research Question 1, a rubric was used to measure

individual student performance on writing summaries. I compared the differences in

overall rubric scores and scores on each rubric element among the three groups using

MANCOVAs. To answer Question 2, I used content analysis to examine patterns that

emerged in length and quality of student summaries. To answer Question 3, seventh-

grade teacher perceptions about student performance on collaborative summary writing

among the three groups were gathered in the form of a reflective journal and teacher

interviews. I used content analysis to catalogue teachers' responses. Question 4 was

answered through student interviews conducted with six students, one high achiever and

one low achiever per group, which were then coded and analyzed. I used a combination

of the teacher reflective journals, teacher interviews, and student interviews to answer Question 5.

Significance of the Study

Reardon, Valentino, and Shores (2012) used data from both national and international literacy assessments to evaluate the status of literacy in America. The researchers determined that reading for comprehension – as per that assessed by many large-scale literacy assessments – is a skill that only about one-third of U.S. middle school students possess. Thus, "many U.S. students enter high school in need of substantial improvement in literacy" (Reardon et al., 2012, p. 32). The significance of this study is that it targets middle school students' literacy by investigating the effect of different modes of instructional strategies on student summary writing, one of the most important basic literacy skills students should learn. Determining which, if any, is more useful in assisting student summary writing could help teachers more effectively use the time spent on teaching this skill. With a limited amount of time and abundant standards and a long way to go to ensure every student has the literacy skills necessary for high school, efficiency and knowledge are always important factors in the classroom.

Organization of the Study

This study includes five chapters. This chapter – Chapter 1 – provides an introduction to the study. Chapter 2 contains a review of literature related to literacy skills, the importance of summary writing, GIST summary writing, technology-enhanced instruction, collaborative learning, collaborative learning with technology, and wikis for collaboration. Chapter 3 describes the research methods used to gather and analyze data.

Chapter 4 reports the research findings while Chapter 5 includes discussions and

conclusions as well as recommendations for future research studies and practitioners.

Chapter II

LITERATURE REVIEW

As teachers seek to identify strategies that can improve literacy skills, it is vital first to understand what those skills are and how those strategies may augment their instruction individually. In Chapter 2, I review literature related to the study including the topics of literacy skills, the importance of summary writing, GIST summary writing, technology-enhanced instruction, collaborative learning, collaborative learning with technology, and wikis for collaboration.

Literacy Skills

According to White (2011), "In order to function fully in daily life and to maximize the contributions they can make to society, older adolescents and adults must be able to read and use written information" (p. 38). Thus, in education, a focus on literacy skills has always been necessary. White (2011) presented a text-task-respondent (TTR) theory that explains the skills of literacy. She described seven skill sets as necessary to conduct common literacy tasks with success. Basic reading, described as the ability to decode and recognize words, language comprehension, understanding the meaning of and relationship among sentences and sentence structure, and text search, which she described as the ability to efficiently search within a text, are two of the vital skills White (2011) discussed. The next four skills included (a) computation identification, identifying calculations necessary to solve numerical-based problems, (b) computation performance, the ability to then perform said calculations, (c) inferential skills, the ability to make suitable text-based inferences, and (d) application skills, the ability to utilize new information to reach goals (White, 2011). According to White,

basic reading and comprehension skills were explicitly taught, but many common literacy tasks require at least some degree of the higher-level inferential and application skills, which were not openly taught. For example, even providing a main idea or summary requires inferential skills. In other words, students typically were expected to provide a main idea or summary although the skills required to complete these tasks were not explicitly taught.

Further progressing the notion that literacy skills have been a necessity in today's society, Murnane, Sawhill, and Snow (2012) claimed that "advanced literacy is a prerequisite to adult success in the twenty-first century" (p. 3). What is advanced literacy? Murnane et al. (2012) described advanced literacy as the ability to use reading as a way to gain knowledge, to combine information, and to examine arguments. So, why has literacy been so much more important in this century than the last? The authors cited the changing labor market over the past 40 years as one major reason that Americans have needed more advanced literacy skills in today's world. Computers, machines, and overseas manufacturing caused a decline in occupations that require only basic literacy skills (such as assembly line workers and file clerks). At the same time, changes in how Americans live led to growth in technical and professional fields, which has required more education and training.

Reardon et al. (2012) noted that around two-thirds of students entering high school have not obtained proficient levels of literacy and comprehension skills. The ACT National Curriculum Survey (2012) has been performed every 3 to 5 years, and it asks teachers about various topics related to curriculum. Part of the survey focuses on teachers' opinions about their students' college readiness. A sample of ELA/writing,

math, reading, and science teachers at all educational levels in both public and private schools across the U.S. received the ACT National Curriculum Survey 2012 by mail and email. A total of 9,937 educators participated in the survey. One significant finding of the ACT National Curriculum Survey 2012 has been the huge rift between the perceptions of college readiness belonging to high school teachers and the college instructors who have had those incoming students. While 89% of high school teachers believed their students were ready for college-level work, only 26% of participating college math, science, English/writing, and reading professors reported incoming students as being adequately prepared for first year courses in their content area (ACT, 2012). Thus, only a little over a quarter of students performed at the necessary level for college-level English, writing, and reading (ACT, 2012).

So, what can literacy educators do? Goatley and Hinchman (2013) reviewed literacy research and proposed four key ideas as literacy educators face Common Core State Standards (CCSS), which encompass these new literacies. The first key idea proposed was that literacy educators already know much about what makes effective literacy instruction (such as teaching students to look at context clues, decoding, etc.), including the importance of differentiation. A strategic point discussed in conjunction with this idea was the development of literacy skills has often been dependent on a social context. The second key idea claimed that "We can take advantage of opportunities in current policy with intentional planning for long-term improvement. Yet we need to be cautious and continually revise our plans as implementation progresses" (Goatley & Hinchman, 2013, p. 59). For example, the new standards focused on content-based literacy, informational texts, and technology; these were topics that may have led to a

more well-rounded form of literacy. However, educators needed to be diligent in following any alterations in wording as misinterpretation of standards may have occurred. The third key idea developed from Goatley and Hinchman's (2013) review of the research was that literacy educators need to be aware of the multiplicity of definitions for being literate in today's world. The authors pointed to research by the New London Group (1996), discussing that the meaning of literacy has been growing and changing as digital communication and social media have become more widely-used for an array of purposes outside of personal connections such as politics and education (Goatley & Hinchman, 2013). This notion has also been seen in the speaking, listening, and viewing strands of the CCSS. The final key idea emerging from the authors' review of literacy research was that teachers have used their expertise gained from experience to teach literacy (Goatley & Hinchman, 2013). In other words, professional development on the expectations of the common core standards has been beneficial for literacy educators while system-wide curriculum mandates for one-size-fits-all type methods is not. Literacy in today's world is a complex assortment of skills, and so literacy instruction needs to be multi-faceted and based on research-backed practices rather than just *the way it has always been*.

Similarly, according to Lawrence, McNeal, and Yildiz (2009), for today's youth, literacy has not simply been reading and writing text; it has been a process of comprehending and utilizing information gained through text, visuals, and technologies. In their study, the researchers conducted a 3-week summer literacy program with high school students that incorporated all of these aspects of literacy. The authors found that students' needs were more appropriately matched by using and providing diverse

materials (in this study, text, visuals, and technology) and allowing students to make cross-content and real-world connections. Furthermore, Lawrence et al. (2009) reported that bringing together multiple literacies – reading, writing, visual, and technological - enabled the students to create genuine, meaningful products and to write for a larger audience.

Importance of Summary Writing

Yuan ke and Hoey (2014) claimed writing summaries was "a synergy that combines reading and understanding the original text, identifying its important information, and composing a short text to synthesize the important information" (p. 89). They described the main strategies summarizers use to reduce text to the main ideas as deletion, selection, and abstraction. According to Yuan ke and Hoey, deletion was leaving out any unimportant information when writing a summary. The next strategy, selection, was described as the point in which the summary writer chose a certain part of a text to be included in the summary because he or she considered that section's meaning as important (Yuan ke & Hoey, 2014). The final strategy, abstraction, was the combination of several pieces of information into one thematic-type statement.

Demaree, Allie, Low, and Taylor (2008) performed a study in which students in a physics course wrote summaries of assigned readings from a textbook to help them "engage meaningfully with the textbook" (p. 107). Participants in the study included 113 students enrolled in the physics course, most of whom were second language learners who possibly found the text intimidating. Data for the study included the summaries themselves as well as interviews with 11 students from the program. Based on student perceptions, the researchers concluded that students found summary writing useful and

helpful in preparing them for exams. Furthermore, findings suggested that summary writing gave the students a sense of empowerment as a result of being able to engage with an otherwise daunting text.

Going beyond simply student perceptions, Graham and Perin (2007) conducted a meta-analysis of 11 writing instruction elements to determine the effectiveness of each. The 11 elements evaluated included writing strategies, summarization, collaborative writing, specific product goals, word processing, sentence combining, prewriting, inquiry activities, process writing approach, study of models, and writing for content learning. Graham and Perin discovered that summarization had an effect size of .82, tying with writing strategies for the highest score out of the 11 elements. Thus, teaching students to summarize text had a "consistent, strong, positive effect" (Graham & Perin, 2007, p. 16) on students' ability to write summaries well. Furthermore, collaborative writing came in second with an effect size of .75, and the authors noted that each study on collaborative writing showed large, positive effects.

In another meta-analysis, Graham and Hebert (2011) analyzed true and quasi-experimental studies to determine the link between writing about material read and reading comprehension. They sought to evaluate the impact of writing instruction on reading comprehension and fluency as well as the influence of how much students write on their reading comprehension. The researchers stated when students write about the material they read, it improved student comprehension of the material. Similarly, Gao (2013) used mediation theory to evaluate literature about the effect of summarization on reading comprehension, and the author confirmed that summary writing had a positive

effect on reading comprehension. Of course, this was important because comprehension has been the first step in a long list of tasks connected to any text.

Focusing on the nature and standards of graduate school, Vang (2013) conducted a study with a group of Master's students to determine the best way to prepare English language learners to meet the demands of Master's degree programs and how to best motivate students to work toward those expectations. The study took place over two courses provided to two different groups of students at a Swedish University. The first trial included 220 international students and the second trial included 90 students, and a questionnaire followed each trial. The researcher chose summary writing because it required one to be clear and concise and avoid plagiarism, much like a Master's thesis. The researcher utilized a few collaborative summaries as well as peer review because, again, the program has a similar demand – the *opposition* – in which students have been required to critique and discuss the work of peers. Vang found that students enjoyed and profited from second language instruction centered on summary writing and peer review. Moreover, Vang referred to summary writing as an *excellent candidate* to help English Language Learners learn to translate information into academic English.

Frey et al. (2003) recognized this importance when they described summary writing as "a gateway skill for other types of writing" (p. 48). The authors conducted a study with 32 participants from an urban public school over a 3-week period of time. The authors used themed readings as well as a video for the content to be summarized using the Generating Interaction between Schemata and Text (GIST) strategy. One issue the researchers encountered was plagiarism by some students, so they realized a need to teach students how to avoid plagiarism. The researchers stated that, "the ability to

summarize text accurately and efficiently without plagiarizing is a core competency for other writing genres" (Frey et al., 2003, p. 44). Thus, like Vang (2013), and Frey et al. (2003) viewed summary writing as an important stepping-stone to other, more involved and/or more difficult writing tasks.

<center>GIST Summary Writing</center>

Cunningham (1982) developed a summarization procedure titled GIST. Although teachers and students utilized it as a method for summarizing, the original purpose was to advance student comprehension of a paragraph's gist (Cunningham, 1982). In the GIST procedure, the teacher (or students) chooses three- to five-sentence paragraphs at an appropriate difficulty level. The students read the first sentence, restating it in 15 words or less; next, the students read the first two sentences, restating the pair in 15 words or less. This continued until the process reduced each entire paragraph to no more than 15 words. Cunningham tested his procedure against a placebo that instead focused students' attention on individual word meanings. The researcher screened 121 fourth grade students for participation using a set of ten paragraphs and those scoring 86.7% or higher for word recognition became the participants. Twenty-eight students from a Southeast elementary school participated in the study. The researcher divided participants into two groups of 14; the experimental group and the placebo group although each had the same instructor: the researcher. Both groups had equal access to a second set of ten paragraphs for the same amount of time. Both groups had the same number and length of lessons that took place at the same time of day (morning) across a 3-week period. The researcher taught the GIST procedure and produced gist statements of the paragraphs to the experimental group, and he taught the placebo group a range of strategies that focused on

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words and their meanings and required an amount of writing equal to that required by the GIST strategy. To compare results of the methods, the researcher used a third set of ten paragraphs to conduct a GIST-recognition test. Also, Cunningham used a fourth set of ten paragraphs to conduct a GIST-writing activity. There was no statistically significant difference between groups on the gist-recognition measurement. However, the GIST procedure showed a large effect size (.7) on the composition measurement, meaning that the GIST strategy led students in the experimental group to write more accurate gist statements than did the strategies from the placebo group.

In a comparison of three summarization strategies, Bean and Steenwyk (1984) randomly divided 60 sixth-grade students into three classes, each followed a different approach to summarization – one control group, one used a rules-based approach, and one used GIST. Researchers measured students' summary writing and reading comprehension in two ways. The first was a paragraph to be summarized in 15 or fewer words, and the second was 75 multiple-choice items from the *Nelson Reading Test*. A one-way ANOVA showed a significant difference between the three groups on the summary writing task, and both experimental groups significantly outperformed the control group (Bean & Steenwyk, 1984). However, the researchers found no statistically significant difference between the GIST and rules-based approaches on the summary writing task. Similarly, by comparing means of the three groups, the researchers noted that students from the experimental groups reached significantly higher reading comprehension levels than students in the control group. Based on both measures, the researchers concluded that the rules-based and GIST strategies were equally effective and significantly superior to the traditional approach.

In a similar comparison of two summarization strategies, a rules-based approach and the GIST strategy, Braxton (2009) examined the effects of each approach on reading comprehension and summary writing of fourth and fifth grade students in an urban, Title I school. The researcher used a quasi-experimental design that included pre- and post-tests for each strategy group. Each group participated in 15 lessons approximately 40-60 minutes in length. Braxton's results indicated that there was no difference in effectiveness between the two interventions. However, both approaches influenced participants' knowledge of and attitude toward summary writing.

Still, rules-based summarization approaches have been difficult for students at times. Brown and Day (1983) examined the ability of students of varying ages (grades five, seven, ten, and college) to utilize so-called *macrorules* while summarizing, including deletion of superfluous information, substitution of *superordinate terms* for a list of items, selection of main ideas, and invention of topic sentences. Findings stretched across ages, showed that students used all rules more effectively as age increased. Even the youngest participants successfully followed the deletion rule. Seventh graders used superordinate terms, albeit ineffectively. Students especially used substitution more effectively with age, and older participants sometimes chose invention over substitution when given a word-limit. Finally, invention of a topic sentence was a difficult rule for participants of all ages; even college-age students used the invention rule appropriately only 50% of the time.

Technology-Enhanced Instruction

According to Shand, Winstead, and Kottler (2012), the goal of technology-enhanced instruction is "to deliver subject-matter content through digital means while

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developing digital literacy skills" (p. 20). Digital literacy skills include five domains, including information literacy, photo-visual literacy, reproduction literacy, branching literacy, and socioemotional literacy. Shand et al. (2012) claimed that there were five types of technology tools that teachers incorporated to enhance technology while simultaneously teaching digital literacy skills. These categories included tools for collaboration (wikis and Google Drive), tools for communication (blogs, e-mails, and classroom-response systems), tools for presentation (PowerPoint, Prezi and interactive white boards), tools for organization (Organizers in Microsoft and Gliffy), and tools for critical-thinking (Web-based interactive tools like Pixton or Quizlet). Incorporating these tools into the classroom improved the quality of instruction as students learned, connected, communicated, developed, and reflected in ways that deepened their content understanding (Shand et al., 2012).

Burns, Klingbeil and Ysseldyke (2010) conducted a study to examine the effects of a technology-enhanced formative evaluation (TEFE) program on students' scores on state-standardized math tests. The research included elementary-age students from 360 elementary schools in Florida, Minnesota, New York, and Texas. The researchers compared schools that used a TEFE program for amounts of time ranging from none at all, 1 to 4 years and 11 months, and 5 or more years. Burns et al. reported schools that utilized the program had larger proportions of students who scored at higher levels on standardized tests than schools that did not use the program. Furthermore, the schools that used the TEFE for a longer period of time (5 or more years) had an even higher percentage of students scoring at proficient levels on standardized assessments.

Aside from just proficiency levels, Al-Khatib (2011) performed a mixed-methods study of 43 senior students in an English Language and Literature Program at the Arab Open University in Lebanon to determine the impact of technology-enhanced learning. The researcher divided participants into themed groups relevant to chosen research topics. Groups conferenced on virtual discussion forums. Researchers monitored students for frequency and quality of contribution in addition to other activities. The researcher noted multiple types of advantages and an overall positive effect from technology-enhanced learning. Advantages discovered from quantitative data included increased motivation, increased dialogue/community discussion (both based on an increased number of accesses and posts), and active involvement with learning (evidenced by student-initiated posts/conversations). Advantages discovered from qualitative data gathered from class presentations included gradual autonomy in student learning, increased sharing and exchanging of helpful resources, and enhanced technical skills over a short period of time.

In an effort to determine what exactly students thought helped them learn best, Geer and Sweeney (2012) performed a qualitative study of 460 participants ages 5-13 from a primary school in South Australia. The researchers gathered data in the form of visual representations with descriptions of an ideal learning environment, a questionnaire, and focus groups; these data included 347 drawings and 200 questionnaires that the researchers analyzed to examine the tools and strategies students believed helped them learn and thus, determine what resources should be in a contemporary learning environment. Through visual representations and comments about what helped them to learn, 77% of students indicated that computers helped them learn, and 44% of students

indicated that interactive white boards were useful. These results indicated that information and communication technologies increased student engagement and that students expected to use such tools in the learning process.

Research has shown that technology enhances instruction because students engage with it; they like to use it, whether at home or school (Lehnart, Madden, MacGill, & Smith, 2007; O'Connor, 2011; Read, 2006). Lenhart et al. (2008) conducted a mixed-methods study of eight focus groups in four cities across the United States. Researchers completed this study through a nationwide telephone survey of parent/child pairs to answer a range of questions dealing with parent and teen perceptions of writing in light of new technologies, the forms of writing in which they engaged, and more. The researchers reported nearly all teens used the Internet, most of them on a daily basis, and own or used other technologies (cell phones, laptops) regularly. Specific to writing, they reported that writing for an audience motivated students more than just writing for a grade, although positive feedback was also a motivator. Participants viewed computer and Internet-based writing tools as having the capability to improve writing instruction as well as increase inclination to revise and edit.

In a related study of a specific Web 2.0 tool, Kajder, Bull, and Van Noy (2004) observed and surveyed Van Noy's seventh-graders to discover their perceptions of blogging in the classroom. In their research, they discovered that using the blog had the students more engaged. Participating students referred to writing on the blog in terms of being something out of the norm, interesting, etc. Furthermore, the students implied that writer's block did not affect them when using the blog. Researchers reported the students

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more likely to share/collaborate using the blog than on regular in-class writing assignments.

In an effort to determine even more how technology affects literacy instruction, Culpepper (2002) conducted an instrumental case study investigating how use of the Internet influenced literacy instruction and development in an eighth grade classroom. Participants included the teacher and 23 students in the eighth grade classroom. Culpepper (2002) collected data over a 4-month period in the following formats: classroom observation notes, emails between herself and teacher, informal interview transcripts, students' online discussion printouts, open-ended questionnaires, and student work samples. After analyzing the multiple forms of data, Culpepper (2002) reported her findings as five assertions about how the use of the Internet impacted literacy instruction and development in this classroom. Those assertions can be summed up by saying that use of the internet in this classroom positively impacted the following: teacher's planning of instruction, the learning environment, students' motivation to read and write in addition to their critical thinking skills, teacher-student and teacher-parent connections, instructional outcomes and learning goals relevant to technology.

<div align="center">Collaborative Learning</div>

According to Johnson and Johnson (1999), cooperative learning, also referred to as collaborative learning, used small groups for instruction in such a way that students worked together to enhance their learning and their peers. The idea behind cooperative learning was students' recognition that the groups' outcome, and thus, each individual's performance, was dependent upon the efforts of the others. As a result, students encouraged and supported one another in their learning. For cooperative learning to be

most effective, the group members needed mutual learning goals that each individual understands, effective communication, equal participation among group members, consensus in decision-making, constructively managed conflicts, equal power dynamics, group cohesion, adequate problem-solving skills, and high interpersonal effectiveness for each member (Johnson & Johnson, 1994).

Comparing collaborative learning to whole-class instruction, Shachar and Sharon (1994) conducted a study with ethnically diverse groups of eighth-grade students from a junior high school in Israel. Participants included 351 Jewish students of both Western and Middle Eastern descent. Classes followed either a Group-Investigation method or a Whole-Class Instructional method. The researchers described the Group Investigation method as a flexible system of small groups led by the teacher as facilitator as students worked collaboratively on a task "structured to invite the participation of each student and to require cooperation among group members in order to accomplish the goals of the task" (Shachar & Sharon, 1994, p. 314). The Whole-Class instructional method refers to a traditional classroom format in which communication was primarily teacher-to-student (Shachar & Sharon, 1994). For 6 months, 197 students were in five classes that utilized the Group Investigation method while 154 students were in four classes that utilized a Whole-Class Instructional method. Students from the Group Investigation classes expressed themselves more frequently and with more words than the traditional group. Students from both ethnic groups in the Group Investigation classes contributed with approximately equal words per turn while in the Whole-Class group, students from Western backgrounds contributed more. Furthermore, students' achievement scores were

higher for those taught with the Group Investigation method than those taught using the Whole-Class method.

Similarly, Terenzini, Cabrera, Colbeck, Parenete, and Bjorklund (2001) compared two types of undergraduate engineering courses; the comparison was between 17 courses taught using cooperative and active learning and six taught using the traditional method of lecture and discussion. Researchers surveyed a total of 480 students across 6 campuses. Part of the survey asked students to self-report on progress made in 27 areas. Terenzini et al. categorized the 27 areas as falling under the themes of design skills, problem-solving skills, communication skills, group skills, and other. The researchers used a principal components factor analysis of the 27 areas. Analysis of survey responses indicated that students reported substantial gains in learning, particularly in the areas of design skills, communication skills, and group skills, when engaged in active and cooperative learning versus lecture and discussion.

As a way to evaluate the benefits of collaborative learning, Gokhale (1995) conducted a study comparing "effectiveness of individual learning versus collaborative learning in enhancing drill-and-practice skills and critical-thinking skills" (p. 23). Forty-eight undergraduate students in industrial technology enrolled in Western Illinois University participated in the study. Gokhale based groups on enrollment in the 271 Basic Electronics course; there were two sections of the course, each containing 24 students. Prior to treatment, all students took a 12-question pre-test containing six drill-and-practice questions and six critical-thinking questions. Each group received a two-part treatment. Part one of the treatment was a 50-minute lecture, given to both groups simultaneously. The researcher used random assignment to assign one section of the

course to the individual learning group and the other to the collaborative learning group for part two of the treatment. Part two was a worksheet which contained drill- and-practice items and critical-thinking items. In the individual learning group, the researcher gave students 30 minutes to complete the worksheet at their own pace. Once 30 minutes were up, he provided the students with an answer key that showed how problems were solved and allowed students 15 minutes to compare their answers to the key for understanding. Then, the researcher gave students a post-test, which also contained drill-and-practice and critical-thinking items. In the collaborative learning section, students chose their own group members to make groups of four; therefore, students organized themselves into six groups of four. Gokhale first gave students an instruction sheet on the collaborative process that, in part, described the expectation that students were to discuss explanations for their solutions and to remain attentive and open-minded to group members' solutions. The researcher gave the groups the worksheet and allowed 30 minutes for students to discuss the solutions until they came to a consensus. Once 30 minutes were up, he provided the answer key for students to compare their answers and allowed them 15 minutes to discuss the answers. Students then took the post-test. This post-test had 30 questions, 15 drill-and-practice items and 15 critical-thinking questions. The *t*-test comparison showed no statistically significant difference between the two groups on the drill-and-practice items of the post-test. However, it showed a statistically significant difference between groups on the critical-thinking items of the test, finding that students from the collaborative learning group performed significantly better on the critical-thinking test than students from the individual-learning group.

To determine more about how students interacted in a collaborative learning environment, Gillies (2008) conducted a study of 164 ninth-grade students from six high schools in Australia. Students were from science classes with either structured or unstructured cooperative groups. The researcher compared groups according to their behaviors, verbal interactions, and learning as they worked on a problem-solving activity that required students to apply classification principles learned in science classes to a non-science situation. The researcher reported students in the structured groups exhibited more on-task and group-focused behaviors. Furthermore, analysis of student discourse from the structured group displayed use of more critical analysis (a higher-order thinking skill) evidenced by the use of more evaluative statements. Thus, in a collaborative learning setting in which teachers and students were trained in and regularly practice cooperative learning, student discourse and behaviors reflected the type of cooperation expected in most workplaces.

Collaborative Learning with Technology

Traver, Kalshery, Diwan, and Warden (2001) conducted a study at Rensselaer Polytechnic Institute in New York to discover student perceptions of utilizing Internet and collaboration in a studio classroom. The classroom was set up so that students worked in groups of two or four, with a computer between two students. Classes met for two 2-hour sessions per week; each session contained varying segments of lecture, group discussion, and group-centered studio exercises. At the end of the course, researchers gave students a 4-point Likert-type survey seeking their responses about the course, technology, and collaboration. The researchers also conducted a pre- and post-test to evaluate student learning; however, students were not required to take the test and they

did not study specifically for the test. Traver et al. conducted the study for two semesters because the first semester, students reported that the 60-item standardized knowledge post-test covered material not discussed in class. The second semester, the researchers based the 35-question post-test more closely on the class material. On the survey, most students reported a positive perception of technology utilized in the course, responding they thought it enhanced their learning. As for collaboration, about two-thirds of students reported they found working in groups helpful. On the 35-item test based on class material, the class pre-test average was 14.29. The post-test average was 25.13 for an average change of 10.48, a significant gain in learning. If students felt both technology and collaboration enhanced their learning experience, and student pre- and post-test scores showed significant gains in learning, then should not collaboration via technology follow similar results?

Vesisenaho et al. (2010) conducted two case studies to enhance students' collaborative learning at the University of Eastern Finland, School of Applied Educational Sciences and Teacher Education. In the first case, students participated in a face-to-face lecture then posted their lecture notes to a blog for peers to see. Researchers used qualitative analysis for this case; they categorized the lecture notes, and at the end of the course, researchers interviewed four of the students, coding and analyzing student responses. In the second case, students conducted lab experiments in a face-to-face setting, and then posted their findings on what the researchers referred to as a "semi-structured wiki-environment" (Vesisenaho et al., 2010, p. 276). Researchers used quantitative analysis for case two. Researchers used a 40-item Likert-scaled questionnaire to gather student perceptions, and the researchers used principal component

analysis to examine the data from student writing. Data from the interviews showed students to be comfortable with sharing their notes online to create shared lecture notes, although analysis of the notes showed that some students produced more notes than others. Researchers organized the notes from case one into five themes including reproduction of lecture content, summary of lecture content, developing lecture content, connecting key ideas, and questions about lecture content. Data from the questionnaire in case two showed that students considered the technology motivating. Furthermore, data showed that students thought the approach supported collaborative learning and that the tools used in the study were suitable for the purpose of the study (Vesisenaho et al., 2010). Researchers concluded that setting the students as the producers of content, as these cases did, was key to enhance learning and collaboration.

Alavi (1994) investigated the impact of a group decision support system (GDSS) in a collaborative learning setting on student learning and evaluation of student experiences. According to Alavi, GDSS is an "integrated set of hardware, software, and communication capabilities aimed at improving group interactions and task performance during face-to-face meetings" (p. 162). Participants were 127 MBA students enrolled in three core classes of their program. Of the participants, 79 attended courses that utilized a GDSS system while the other 48 attended traditional courses. In the experimental group, teams consisted of four members. Both the experimental and control group used the same collaborative learning technique to analyze the same business cases. Results from the participant questionnaire indicated that students from the GDSS group perceived that their skill development, learning, and experience reached higher levels than did the students participating in the traditional courses. Moreover, the students who utilized the

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technology-enhanced collaborative learning platform earned final course grades significantly higher than the students who did not use the technology-enhanced platform.

In an effort to determine teacher perceptions as to how information and communication technologies (ICTs) could have enhanced collaborative learning, García-Valcárcel, Basilotta, and López (2014) conducted a qualitative study. The researchers collected interview data from primary and secondary school teachers from 20 schools that previously received ICT accreditation. Analysis of interviews focused on categorizing the advantages and disadvantages discussed during the interviews as well as the number of references to each advantage and disadvantage. Overall, teachers viewed ICTs as having more advantages in collaborative learning than disadvantages. Specifically, the main advantages from using ICTs in collaborative learning discussed during interviews include development of *transversal* skills, peer interaction among students, learning, and motivation. The primary disadvantage discussed during the interviews centered on aspects of curriculum development such as time constraints, behavior management, and differences in participation levels among students.

Pymm and Hay (2014) conducted a study to determine the impact of a specific technology on content learning and its ability to promote communication and collaboration among distance students. In 2010 and 2011, the researchers gave approximately 100 undergraduate students (per semester for four semesters) in a collection development class a collaborative assignment to complete utilizing Etherpad, a document-sharing platform. This online class contained students mostly based in Australia with a few from Hong Kong, and most were part-time students with various outside responsibilities. The researchers assigned students alphabetically to groups of

four, gave them "the link to a blank Etherpad document and asked [them] to work together in examining a particular collection development policy, commenting on its strengths and weaknesses" (Pymm & Hay, 2014, p. 139). The researchers provided details of the assignment via an online study guide, a podcast from the lecturer, and an online chat. Students had 3 weeks to complete the task. Because Etherpad tracked individual contributions, the instructor graded each student independently, based on his/her contribution. Etherpad's chat sidebar recorded conversations among group members as they collaborate, and the researchers collected these conversations as the data for this study. Six themes emerged from coding Group Conversations: social effectiveness of the Etherpad platform, provision of affective support to each other, use of the Etherpad platform as a problem-solving opportunity, the use of the Etherpad platform as a project management platform, the development of discipline-based knowledge, and consideration of the knowledge and values of digital citizenship. Researchers found that "active groups held discussions. . . that served to create a sense of community within the group. Most participants reported they found the experience a positive one, for both the knowledge gained and the interaction with others" (Pymm & Hay, 2014, p. 142). More specifically, "around 90% of groups used the requirements and demands of the shared task to readily establish a community of practice approach that supported collaborative decision making in a shared, democratic and inclusive manner" (Pymm & Hay, 2014, pp. 142-143). Thus, the nature of the task along with the Etherpad technology positively influenced communication and collaboration among distance students.

Wikis for Collaboration

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Wikis are web pages that "can be used by all to publish new content direct to the Web, including text, images and hyperlinks; to edit existing content; and also, because the wiki is fluid and open to all, to 'roll back' if necessary to previous versions through a 'page history' utility" (Wheeler, Yeomans, & Wheeler, 2008, p. 989). There are many possibilities for teachers looking to create classroom wikis; PBWiki, Wikispaces, and Wetpaint are a few. Wheeler et al. (2008) conducted a study at the University of Plymouth in the United Kingdom in which four groups of education students used the wiki regularly to store and edit work and as a forum for discussion all during class sessions. The researchers asked students to post their views on the use of the wiki onto the discussion board, and they also requested that students complete a post-course questionnaire through email. Students in this study reported being more aware that others would be looking at their writing, increasing a desire for accuracy and relevance in their writing. These participants also reported that the feedback and collaboration provided via the wiki space enabled them to become better writers.

Reich, Murnane, and Willett (2012) worked with 180,000 wikis to determine the types of learning opportunities that wikis provided and the distribution of those learning opportunities across schools with varying socioeconomic populations. As data, the researchers asked teachers and students what high quality work on a wiki looks like, they randomly sampled wikis to determine what types of activities occurred on them, and they researched literature on measuring quality and learning in online environments. The researchers found that wikis created for student assignments/portfolios or for collaborative work on multimedia products prepared students for collaborating and creating in the digital age.

Larusson and Alterman (2009) evaluated two case studies for evidence of student collaboration; one was on a wiki-based assignment, and the other one was on a blog-based assignment. The case studies took place at Brandeis University and the authors were the teacher and teaching assistant in both cases. One case study included 18 undergraduate participants involved in "tightly coupled collaborations" (Larusson & Alterman, 2009, p. 16). The other study focused on nine participants, six graduate and three undergraduate students in a loosely coupled co-blogging activity. The researchers discovered that the web-based format of both wikis and blogs encouraged and eased collaboration among students, even with differing requirements (tightly-coupled versus loosely coupled) for the 'collaborative' aspect of the activity.

In an effort to evaluate the effectiveness of a wiki on student collaboration, Calabretto and Rao (2011) performed a mixed-methods study of 156 fourth-year undergraduate pharmacy students at the University of South Australia. This particular study assessed wiki use as a collaborative forum for case-based problem solving (Calabretto & Rao, 2011). Data came from observations, analysis of student interaction with the wiki, and an online questionnaire. All students utilized the tutorials, but only 28 of the participants completed an online questionnaire. According to questionnaire results, 75% of students found the wiki to be useful. Overall, both students and tutors found the wiki to be useful because it enabled students to merge knowledge and forced students to gather, reflect on, and examine information (Calabretto & Rao, 2011). Use of the wiki led to creation of 38 discussion threads, 32 of which centered on the workshops, indicating that students valued the ability to interact about course content via online discussions.

Wichadee (2010) performed a study of 35 students enrolled in an English Fundamentals course at Bangkok University in Thailand in which students worked collaboratively in small groups on a wikispace to write summaries. The researcher looked at mean scores on summary pre- and post-tests as well as student responses on a survey about instruction through the wiki. A paired samples *t* test indicated a significantly higher post-test mean score (Wichadee, 2010). Furthermore, students' survey responses showed an overall positive attitude towards learning through the wiki. Wichadee concluded that, overall, wikis were valuable as instructional tools and may have assisted in developing students' writing skills.

Summary

With growing technology and the more rigorous CCSS, the definition of literacy is expanding (Goatley & Hinchman, 2013; Lawrence et al., 2009). Furthermore, due to an increase in fields that require more education and training than in the past, and because literacy skills have been such an important part of learning and life in general, a need exists to ensure that students develop those skills at an appropriate level (Murnane et al., 2012; White, 2011). Yet, researchers suggested that students have not obtained literacy skills adequate to prepare them for even their next grade level (ACT, 2012; Reardon et al., 2012).

How can educators address these issues? Begin with the basics. One of the most fundamental skills that enhances both reading comprehension and writing skills is summary writing (Demaree et al., 2008; Graham & Hebert, 2011; Vang, 2013; Yuan ke & Hoey, 2014). Teaching students to write summaries may have enhanced not only their ability to read and write for an ELA class but also literacy in other content areas (Frey et

al., 2003; Graham & Perin, 2007). One method for writing summaries, GIST, developed by James Cunningham in 1982, has been more appropriate for middle school-age students as it has not required some of the more difficult tasks (such as invention of topic sentences) required by some rules-based approaches (Brown & Day, 1983; Cunningham, 1982). However, it enhanced students' ability to write summaries to the same extent as rules-based approaches (Bean & Steenwyk, 1984; Braxton, 2009).

Technology-enhanced instruction has been one way to work on broadening the scope of literacy; it enabled a literacy educator to allow students to develop and practice reading/writing skills in addition to digital literacy skills (Shand et al., 2012). A variety of technology-enhanced environments increased student motivation, engagement, critical thinking, writing instruction, and student learning (Al-Khatib, 2011; Burns et al., 2010; Culpepper, 2002; Geer & Sweeney, 2012; Kajder et al., 2004; Lenhart et al., 2008). Similarly, collaborative learning has a positive impact on students' achievement, critical-thinking and communication skills (Gillies, 2008; Gokhale, 1995; Shachar & Sharon, 1994; Terenzini et al., 2001). Because both technology-enhanced learning and collaborative learning have shown such benefits, then it would follow that collaborative learning via a technology-enhanced learning environment would have a similar impact. Students and teachers alike have positive perceptions of the use of technology to motivate, enhance collaboration and communication, and improve learning (Gillies, 2008; Gokhale, 1995; Shachar & Sharon, 1994; Terenzini et al., 2001).

Based on research, wiki use has improved student collaboration (Larusson & Alterman, 2009; Reich et al., 2012). Furthermore, not only have students believed wikis helped them to become better writers (Wheeler et al., 2008), but Wichadee (2010)

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performed a study that proved use of the wiki increased student learning. Thus, the

accessibility and fluidity of a wiki, along with its being user-friendly and familiar to

students, made it a perfect candidate for this study on collaborative practice via

technology to enhance summary writing skills.

Chapter III

METHODOLOGY

This chapter begins with an introduction to the methodology of this study. After the introduction, I enumerate the research questions investigated in this study. Following the research questions is a discussion of the assumptions and limitations of the study, followed by a description of the research design, broken down into a quantitative and a qualitative phase. I describe the method of sample selection, followed by the instrumentation and instrument validity and reliability. The chapter closes with the process of data collection.

I sought to determine how collaborative practice utilizing three modes of instructional strategies would impact students' individual performance on summary writing.

Research Questions

Research Question 1. How is individual student performance on writing summaries impacted by different instructional strategies?

Research Question 2. What patterns emerge in length and quality of student summaries?

Research Question 3. What are seventh-grade teacher perceptions about student performance on collaborative GIST summary writing?

Research Question 4. What are seventh-grade student perceptions about their performance on collaborative GIST summary writing?

Research Question 5. What are seventh-grade teacher and student perceptions about collaborative GIST summary writing with technology?

Research Design

I employed a mixed-methods design. Mixed-methods research involves the mixing of quantitative and qualitative approaches, often as a way to strengthen the study (Creswell, 2009). Quantitative research methods are typically utilized for testing theories to examine relationships among variables (Creswell, 2009). As such, quantitative data are usually numerical and may not provide the information necessary to draw conclusions about the data. On the other hand, qualitative methods typically seek to understand meaning found in various situations, problems, or items. However, for triangulation, it is often beneficial to include both qualitative and quantitative data to support findings and conclusions (Creswell & Clark, 2011). I used an explanatory sequential mixed-methods design as the qualitative data were gathered after the quantitative data (Creswell & Clark, 2011). An explanatory design is used when qualitative data are gathered to explain quantitative data in more detail (Creswell & Clark, 2011). Because there is equal value in analyzing the quantitative and qualitative data for understanding the topic, an explanatory sequential design is the most appropriate.

In this study, three modes of instructional strategies for summary writing were implemented. Students from Group A followed the traditional method of summary writing instruction. Students had to look for the main ideas and create a summary that strings the main ideas together. Students from Groups B and C followed the GIST summarization strategy (i.e., divide the text into sections and create a summary of 15-words per section). Students from both Groups A and B completed their collaborative

practice face-to-face within the classroom and hand-wrote their summaries. Students

from Group C collaborated via a wiki page and posted their collaborative summaries on

that page within the classroom by rotating through the classroom computers (see Table

1). In this study, rubric evaluations of the summaries were provided as they were

completed so that students received feedback prior to the next lesson for optimal student

growth. Student summaries were also collected to track growth on summary writing.

The teacher reflections took place immediately following each lesson as the time

immediately following observations was crucial for reflection (Patton, 2002). I also

conducted teacher interviews for more rich data and student interviews to identify student

perceptions of the strategies used.

Table 1

Instructional Strategies

Instructional Strategies	Group A Collaborative Traditional	Group B Collaborative GIST Summary Writing	Group C Collaborative GIST Summary Writing with Technology
Collaboration	√	√	√
GIST	X	√	√
Technology (Wiki)	X	X	√

Quantitative Data

The quantitative data I gathered for question one were average rubric scores on

pre-, mid- and post-assessments for each group. A MANCOVA test was used to

determine whether mid- and post-assessment scores from one group were significantly

higher than scores from other groups after using the assigned instructional strategy. Pre-

assessment was used as a co-variable to statistically control the impact of pre-assessment

on the mid- and post-assessments. The independent variable was the instructional strategy

used to support student performance on summary writing. As mentioned above, Group A was taught summary writing using the traditional method; Group B was taught summary writing using the GIST strategy; Group C was taught summary writing using the GIST strategy with the collaboration via wiki technology. The dependent variables were the mid- and post-assessment scores. These assessment scores were based on a rubric containing five elements (length, accuracy, paraphrasing, focus, and conventions), each ranging from a score of "1" to "4", for an overall score out of 20.

Qualitative Data

The qualitative data were gathered to answer Questions 2 through 5. The purpose of investigating Question 2 was to determine which rubric elements (length, accuracy, paraphrasing, focus, and conventions), contributed to the quality of the student summaries in each group. I conducted content analyses of student summaries for all three groups by first choosing ten summaries from each group, five written by high achievers and five written by low achievers. Each student's assessments were analyzed by rubric element, noting reasons for the scores students received on each element. Emerging patterns were evaluated to determine whether a particular instructional strategy impacted student learning outcomes more. Comparison of all three groups assisted in determining the effect of each strategy on the emerging patterns for each rubric element.

The purpose of investigating Question 3 was to understand what teachers thought were the major benefits, issues, etc., of the collaboration and summarization strategies (Groups B and C). Teacher reflective journals from Groups B and C were collected. Teacher reflective journals were guided by open-ended questions, and content analysis was performed. Questions centered on how productively students appeared to collaborate

and how students understood and responded to the summary strategy. See Appendix A for journal prompts. Additionally, I interviewed the teachers of Groups B and C at the end of the research to gather more in-depth information. The interview questions focused on the benefits and challenges of teaching with GIST, the effectiveness of the collaboration and the strategy itself, student growth, and technology. See Appendix B for teacher interview questions.

The purpose of investigating Question 4 was to understand what students thought were the major benefits, issues, etc. of the collaboration and summarization strategies (Groups A, B, and C). After scores were gathered, I chose one high achiever and one low achiever from each group to interview, for a total of six student interviews. Student interview questions focused on how well students felt they understood the strategy and their perceptions of the impact of group work on independent assessments. See Appendix C for student interview questions.

The purpose of investigating Question 5 was to understand teacher and student perceptions about how technology would have affected this summary writing unit. Again, information for this question came from teacher and student interviews as well as teacher reflective journals. For the teacher journals, no specific question was asked about technology; however, in Group C's teacher reflection of Lesson One, she discussed the difficulty the students encountered and the frustration they felt trying to communicate solely through technology. In the teacher interview for Group C, I asked her, "How did the technology affect student performance on lesson 1? Why did you feel that it was not in students' best interest to continue using technology for the remainder of the summaries?" In student interviews, students were asked, "How do you think technology

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would have affected your summaries?" followed by, "You guys always use technology!
You are constantly texting each other even if the person is across the room from you
instead of talking. So how is this different?"

Sample Selection

The sample for this study included seventh-grade students from a rural South
Georgia school and their teachers. A purposeful sample, which according to Creswell
and Clark, (2011) is a method in which "researchers intentionally select participants," (p.
173) was used - specifically, a convenience sample of easily accessible participants –
those from the school in which I teach. Institutional Review Board approvals were
granted, a permission letter was obtained from the school, and consent forms were
obtained from instructors, parents, and students (see Appendices D and E). The number
of participants included in the study totaled 139 for the quantitative data. For the teacher
reflective journals and interviews, there were two participants, the teachers of Groups B
and C. For student interviews, a purposeful sample of one high achiever and one low
achiever per group (A, B, and C) was utilized for a total of six student participants for the
qualitative data. I chose to interview low achievers to identify student perceptions of
how effective the strategies were for struggling students. However, I also understood that
often, low achievers give minimal information, so to get more information as well as to
see if the strategies also challenged academically advanced students, I chose to interview
high achievers.

Instrumentation

The instrument used for data collection in the quantitative phase was a rubric
adapted with permission (see Appendix F) from Frey et al. (2003). All of the elements

from the original rubric remained (length, accuracy, paraphrasing, focus, and conventions). The primary differences are definitive words like 'all,' 'most,' 'some,' etc., the descriptors under the *length* element and the change of the word *story* throughout the rubric to the word *text*. For the purpose of this study, the word *text* was used rather than *story* because none of the texts utilized in this research are literary; they are all nonfiction (see Appendix G). The wording under the element of length was changed because the texts for the lessons and assessments vary. Rather than have a set number of sentences regardless of the length of the original text, this study used a set number of words (the number set forth by the GIST strategy) per section once the students divided it into sections. On the rubric, any score between 17.9 and 20 was equal to a percentile of 90-100 and thus, considered *proficient*. A score between 15.9 and 17 .8 was equal to a percentile score of 80-89.5 and considered *emerging*. Any score below 17.8 was considered *needs work*.

The same rubric was used for students' classroom practice and assessments so that students were familiar with the method of evaluation. All students, regardless of grouping, received the same texts for the lessons and assessments. The CCSS demand a text complexity level in the Lexile range of 970 to 1120 for seventh grade students (MetaMetrics, 2014). Because this research took place in the Spring semester of 2015, a starting point was the halfway point for this range, 1045. For each assessment, students were given a nonfiction text from Readworks.org at a Lexile level of 1080. The higher Lexile level was chosen to challenge even higher-achieving students. The pre-assessment text was titled *Will Human Life on Earth Come to an End*. The mid-assessment text was titled *Lightning and Fire*, and the post-assessment text was titled *The Eco Pyramid*. For

each in-class practice, students were given a nonfiction text from the same website at a

Lexile level of 1050. This Lexile was at a more approachable level for students typically

intimidated by nonfiction. For Lesson 1, the whole-class sample was performed utilizing

the text *Valley Nuts* and the small group practice was based on the text *Water*: *A Give and

Take*. Lesson 2's small group practice was from the text *Sir Isaac Newton and Lebron

James*. Lessons 3 and 4 provided small group practice on the texts *Weather Air Patterns*

and *Origins of the Interne*t, respectively. Permission was granted from Readworks.org

(Appendix H) to utilize their passages.

In the qualitative strand, I as the researcher was the instrument for collecting,

analyzing, and interpreting the qualitative data. I collected student summaries and

teacher reflective journals for supporting quantitative findings and exploring teachers'

thoughts on student performance and instructional strategies used. The interviews were

also instruments utilized in the qualitative strand to further identify perceptions identified

in teacher journals and to identify student perceptions of the strategies used and how

technology would have affected their performance.

Student interviews consisted of five to six questions. The first question was

"How well do you think you understood the strategy you used when writing your

summaries?" The reason for this question was to identify student perceptions of their

understanding of the strategy they used. The second question was "How do you think

working with a group for the lessons affected your work on the individual summaries?"

This question was to identify student perceptions about the effect of collaborative

learning on their summary writing. The next question asked was "How do you think

technology would have affected your summaries?" followed by "You guys always use

technology! You are constantly texting each other even if the person is across the room from you instead of talking. So how is this different?" The purpose of these questions was to determine student perceptions of how technology would have affected their summary writing as well as if and how technology for academic use differs from their seemingly constant use of technology for non-academic purposes. For the GIST students, I also asked, "How do you think that having a certain number of words (15 words for each section) affected the way you wrote your summary? Do you think it made it easier, harder, etc.? Why?" The purpose in asking this question was to determine the students' perceptions of the GIST strategy. See Appendix C for the full list of student interview questions.

Teacher interviews consisted of seven to eight questions. To determine teacher perceptions specifically about the GIST strategy, I asked questions such as "What were the benefits and challenges of teaching with GIST?" and "How well did students seem to understand the GIST strategy?" I asked the question "How do you think working as a group for lessons impacted student performance on individual assessments?" to identify teacher perceptions about the collaborative aspect of instruction of summary writing. I also asked teachers "What type/types of growth do you think students experienced through this unit?" in order to discover teacher perceptions of student comprehension, growth, and performance. For the teacher of Group C, "How did the technology affect student performance on Lesson One? Why did you feel that it was not in the students' best interest to continue using technology for the remainder of the summaries?" was the final question in order to get a clearer picture of how and why the technology piece that

should have been a part of Group C's instruction did not work. See Appendix B for teacher interview questions.

Instrument Validity and Reliability

When conducting research, validity and reliability are vital considerations to reduce error. Validity "serves the purpose of checking on the quality of the data, the results, and the interpretation" (Creswell & Clark, 2011, p. 210). For this study, internal validity is the main concern; this refers to "the extent to which the investigator can conclude that there is a cause and effect relationship among variables" (Creswell & Clark, 2011, p. 211). In this study, triangulation of multiple sources of data (student assessment scores, student summaries, teacher journals, and teacher and student interviews) helps to ensure validity. Reliability describes the extent to which an instrument is accurate, stable, and consistent (Creswell, 2009). One step that was taken to ensure validity and reliability in this study is that an outside evaluator was used to score the summaries of all three groups. I met with the evaluator prior to beginning the student summaries, and we discussed exactly what was expected for each element of the rubric. The outside evaluator was another teacher at the same school. She has been teaching for 24 years and holds certificates in all subjects for both regular and special education. She has taught mostly sixth and seventh grade math and science, but she also taught English for 7 years as well as third and fourth grade early in her career. This outside evaluator increased reliability by reducing discrepancies in the way three separate evaluators (teachers) may have scored the summaries. An attempt was originally made to score a few summaries to see how similarly all three teachers graded them, but there were too many differences, so the decision to utilize the outside evaluator was affirmed.

As a research student, I have conducted interviews with one student and two teachers, but I have only coded information once as part of a whole-class assignment. My knowledge about qualitative methods has been from one qualitative research course, Qualitative Research Methods. In that course, I conducted one interview with a student and collaboratively coded student responses on a Google form with classmates.

To prepare myself for the content analysis portion, Dr. Britney Barnes from my doctoral program assisted me. I received instruction from her prior to conducting these practices myself. She successfully completed a mixed-methods dissertation in Spring 2015 and utilized an explanatory sequential design just as I did for this study. The participants in her study participated in interviews and writing samples, and she utilized the content analysis method to analyze the qualitative data.

After I conducted the interviews, I emailed Dr. Barnes about my study, provided her with the interview questions used with students, and provided one of the interviews for her to code. I also coded the same interview and compared our terms and results. We coded in different ways, even using different methods. We emailed back and forth again to discuss the terminology. I created a rubric with a range of responses students may have provided for each question. I then emailed another student interview, and this time, we both used the coding rubric to code the student's responses. This time, our coding was the same. I ran our separate codes through Statistical Package for the Social Science to find the inter-coder reliability, and because our coding was the same, the inter-rater reliability was significant at a .000 level. After the coding training, I continued to code the rest of the interviews myself.

Procedures and Data Collection

Students were given independent pre-, mid-, and post-assessments to evaluate their skill level prior to as well as in the process of and after learning how to summarize based on the methods included in the study. Each lesson contained the same text for each group. Each group began with an introductory lesson on how to summarize according to its strategy – traditional or GIST – with a whole-class practice based on the same text for each group. This whole-class lesson was followed by small-group practice in one of two ways: the collaborative traditional and collaborative GIST-only groups created summaries based on group discussions, and hand-wrote their summaries. The collaborative GIST with Technology group students created a summary in small groups through posts and discussions via the class wiki (see Appendix I). All small-groups consisted of 3-5 students within each class group, with groups of four being preferred as class size allows. The second lesson for each group, which took place later the same week, consisted of a quick review of the strategy and feedback from the teacher about the previous summaries' weaknesses followed by a new text for groups to summarize as they did before. The second lesson was followed by an independent mid- assessment during the following week. On the week after the mid-assessment, the third and fourth lessons were conducted, following the same format as the second. Finally, on week 5, individual post-assessments followed the fourth lesson. See Appendix J for a weekly overview of the lesson plans. Appendices K, L, and M provide the lesson plans for the collaborative traditional, collaborative GIST only, and collaborative GIST with technology groups, respectively.

Data for the quantitative strand were collected as each assessment was conducted. As the outside grader finished scoring each lesson or assessment summary, I recorded each student's score. Prior to beginning instruction on summary writing, a pre-assessment was given. After two lessons, a mid-assessment was conducted, and after two more lessons, a post-assessment was conducted. I gathered a list of scores for each group, and means were calculated for each of the three assessments. Furthermore, I recorded each student's score in every element of the rubric – length, accuracy, paraphrasing, focus, and conventions – for each assessment.

Data for the qualitative strand were collected throughout the 5-week period as well as at the end of the unit. Data for Question 2 were the students' summaries. I coded and analyzed summaries from 30 purposefully-selected students, five high achievers and five low achievers per group (A, B and C). High and low achievers were determined according to students' scores on the post-assessment. These samples represented students across the academic spectrum from low ability levels to high ability levels from each group. This allowed for analysis of summaries from each assessment phase of the study in order to see growth and/or change. Teacher reflective journals, which provided data for Research Question 3, were maintained throughout the research. Journals were collected at the end of the summarization unit. Teacher responses were coded and analyzed to determine what aspects of instruction teachers believed were most beneficial and/or problematic for students. I also conducted teacher and student interviews to collect more data about their perception of different instructional strategies. Both the teacher interviews, which also provided data for Research Question 3, and the student interviews, which provided data for research Question 4, were conducted after the

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research unit was completed in order to better inform the quantitative data collected. I interviewed two teachers with the teacher of Group B being asked seven questions and the teacher of Group C being asked eight questions because she was also asked about the technology aspect that her group was to implement. I interviewed six students with student interviews containing five questions for the traditional group students and six questions for the students who used the GIST strategy.

Assumptions of the Study

I assumed that students were trying their best when they completed the summaries. This was a safe assumption. Regardless of the study, the students received a grade for the summaries because they were class assignments. Students' personal information was removed from the report to preserve their anonymity. The study further assumed that students have a basic working knowledge of how to navigate a wiki. To ensure that all students from the collaborative GIST with technology group had been exposed to a wiki prior to beginning the study, the instructor for the group had students log in and familiarize themselves with the layout. Another assumption was that teachers and students answered honestly about their experiences in the interviews. Teachers and students were assured that participation in the interviews was voluntary, so they could choose whether or not to participate as well as whether or not to continue once interviews began. I assured all participants that no one else besides me would view the interview tapes and that they could request to stop recording at any time. I also assured the participants that transcripts would be made, but no identifying information would be included in the transcript.

Limitations of the Study

With over 300,000 middle school students in the state of Georgia alone, the relatively small sample size of 225 was a major limitation. Furthermore, the use of a convenience sample meant that all of the participants were located in a single school in a rural South Georgia town. This isolation of location further limited the generalizability of the study. Moreover, the use of a convenience sample restricted the number of students in Group B. Because students were assigned to groups based on class sizes and one teacher only had two ELA courses, her group was smaller than the other two. The other two teachers instructed four ELA courses each, so those groups were larger. Another limitation in this study was the implementation of technology use in Group C. I could only provide student perceptions of using it, but I was not able to draw a conclusion about the impact of technology on student summary writing because of the conditions that Group C encountered in the research process, which caused the plan to change.

Chapter IV

RESULTS

The purpose of this study was to determine how collaborative practice utilizing different instructional strategies would affect students' individual performance on summary writing. Student scores on individual pre-, mid-, and post-assessments were collected and analyzed to determine if there were any differences among groups. Student summaries, teacher journals, and teacher and student interviews were coded and examined to determine factors affecting the differences in student assessment scores, and teacher and student perceptions about student performance on collaborative GIST summary writing.

Research Questions

Research Question 1. How is individual student performance on writing summaries impacted by different instructional strategies?

Research Question 2. What patterns emerge in length and quality of student summaries?

Research Question 3. What are seventh-grade teachers' perceptions about student performance on collaborative GIST summary writing?

Research Question 4. What are seventh-grade students' perceptions about their performance on collaborative GIST summary writing?

Research Question 5. What are seventh-grade teacher and student perceptions about collaborative GIST summary writing with technology?

Changes to Research Plan

The plan for the study did change once the unit began. Group C, the collaborative GIST with technology group, only followed the original plan for one lesson. The teacher immediately let the investigator know that students were upset and worried about their performance due to only communicating through technology. Another class period even tried using only the comments in Google Docs, so that the technology piece could remain, but students were still frustrated and concerned about time. In her reflection of that first lesson, the teacher stated that, "students were overwhelmed in trying to take turns editing and making comments without talking." She also commented that time was her only concern. Because she thought that the technology piece was not in her students' best interest, the technology piece was dropped. Therefore, both Groups B and C were collaborative GIST groups that allowed students to work collaboratively and hand-write their summaries. The groups remained separate in terms of data collection because the groups had different instructors and because they did try to use technology on Lesson 1.

Research Question 1: Impact of Different Instructional Strategies on Individual Summaries

Data for Research Question 1 were collected through the adapted Frey et al. (2003) rubric. Scores for each student's pre-, mid-, and post-assessments were gathered for a total of 154 students, then student outliers – Talented and Gifted and Special Education students – were deleted, leaving 139 students' scores to be analyzed. Table 2 presents the number of students' scores analyzed in each group.

Table 2

Number of Students per Group

Group	Group A Collaborative Traditional	Group B Collaborative GIST Summary Writing	Group C Collaborative GIST Summary Writing with Technology
Number	53	36	50

A Multivariate Analysis of Covariance (MANCOVA) test was utilized in order to compare mid- and post-assessment scores among groups by statistically controlling the effect of the pre-assessment scores. The overall assessment scores came from the adapted Frey et al. (2003) rubric containing five elements (length, accuracy, paraphrasing, focus, and conventions) scored on a scale of "1" to "4" each. The independent variable was the instructional strategy each group received. The co-variable was student pre-assessment scores, and the dependent variables were the mid-and post-assessment scores. Table 3 presents the mean and standard deviation of the pre-, mid- and post-assessment scores for each group. Students in Group B received lowest overall scores on the pre-assessment ($M = 11.17$, $SD = 1.88$), mid-assessment ($M = 13.75$, $SD = 1.90$) and post-assessment ($M = 13.22$, $SD = 2.19$), and students in Group C received the highest overall scores on both the mid-assessment ($M = 14.94$, $SD = 2.28$) and post-assessment ($M = 15.78$, $SD = 2.48$). Figure 1 presents the overall score change from the pre-, mid- to post-assessments.

Table 3

Mean and Standard Deviation of Pre-, Mid- and Post-Assessments by Group

Group	Pre-Assessment		Mid-Assessment		Post-Assessment	
	M	*SD*	*M*	*SD*	*M*	*SD*
A – Collaborative Traditional	12.55	1.45	14.34	2.47	14.77	2.07
B – Collaborative GIST Only	11.17	1.88	13.75	1.90	13.22	2.19
C – Collaborative GIST with Tech	12.54	1.63	14.94	2.28	15.78	2.48
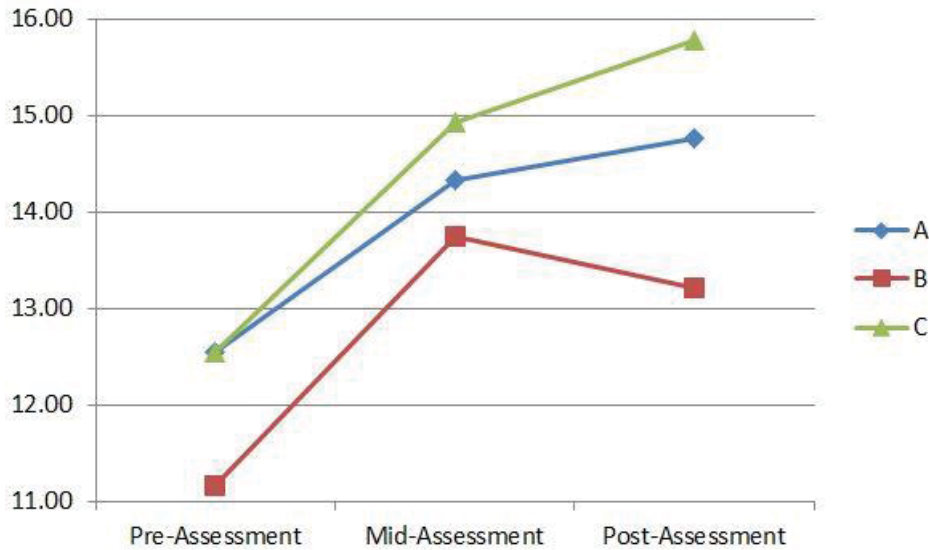
Figure 1. The Overall Score Change from the Pre-, Mid- to Post-Assessments.

The purpose of the Box's test of equality of covariance matrices was to test the assumption of homogeneity of covariance across groups. It was extremely sensitive to violations of normality, so $p < .001$ was taken as a criterion for the Box's test in this study. According to its result, Box's M (7.44) was not significant, p (.296) > .001, indicating that there was no significant difference between the covariance matrices, so the assumption of MANCOVA was not violated and the Wilks' Lambda was an appropriate test to use. The Wilks' Lambda test results showed that the MANCOVA test was significant (Wilks' Lambda = .88, $F(4, 268) = 4.60$, $p < .05$, Partial Eta Squared = .064), so it was necessary to examine the between-subject effects. The result of Levene's test of

equality of error variances was not significant, $F_{mid\text{-}assessment}$ (2, 136) = 1.72, p > .05 and $F_{post\text{-}assessment}$ (2, 136) = 1.44, p > .05; it meant that the variances of both mid- and post-assessment scores were equal across groups and the assumption of MANCOVA was not violated.

The test result of between-subject effects indicated that no significant difference was found in mid-assessment scores across groups, F(2, 135) = 1.15, p > .05, Partial Eta Squared = .017. However, there was a significant difference in post-assessment scores across groups (F(2, 135) = 8.98, p < .05, Partial Eta Squared = .117). After multiple group-by-group comparisons, a significant difference was found in post-assessment scores between Groups B (M = 13.22, SD = 2.19) and C (M = 15.78, SD = 2.48) (p < .05) with Group C having the highest scores out of all three groups. There was also a slight tendency toward significant differences in post-assessment scores between Groups A (M = 14.77, SD = 2.07) and B (M = 13.22, SD = 2.19) (.1 > p > .05), and Groups A (M = 14.77, SD = 2.07) and C (M = 15.78, SD = 2.48) (.1 > p > .05). If the sample size was larger, a more significant result may show. See Table 4 for group-to-group comparisons on the overall assessment scores.

Table 4

Comparison between Groups on the Overall Assessment Scores

Assessment	Group	Compared to	Mean Difference	Sig.
Mid-Assessment	A	B	-.08	1.00
		C	-.60	.46
	B	A	.08	1.00
		C	-.53	.86
	C	A	.60	.46
		B	.53	.86
Post-Assessment	A	B	1.13	.08
		C	-1.01	.07
	B	A	-1.13	.08
		C	-2.14	.00*
	C	A	1.01	.07
		B	2.14	.00*

* $p < 0.05$

To gather further information on differences among groups, I recorded each student's assessment scores on each element in the adapted Frey et al. (2003) rubric – length, accuracy, paraphrasing, focus, and conventions. Each element was scored on a "1" to "4" scale with "1" being the lowest and "4" being the highest. A MANCOVA test was used to compare student scores by element.

When the data for the element of length was run, the Box's M test was not significant (p (.622) > .001). It indicated that no significant difference between the covariance matrices was found, so the assumption of MANCOVA was not violated and the Wilks' Lambda test was appropriate to use. The Wilks' Lambda test results showed that the MANCOVA test was not significant (Wilks' Lambda = .95, $F(4, 268) = 1.80$, p > .05, Partial Eta Squared = .026). It meant that there was no significant difference in both mid- and post-assessments regarding the element of length found among groups.

The next element on the rubric was accuracy. With the scores for accuracy, the Box's M test measured Box's M (11.31), p (.087) > .001. Again, there was no significant difference between the covariance matrices, so the assumption of MANCOVA was not violated and the Wilks' Lambda test was used for the result. The Wilks' Lambda test results showed that there was no significant difference in both mid- and post-assessments regarding the element of accuracy found among groups (Wilks' Lambda = .98, F(4, 268) = .57, p > .05, Partial Eta Squared = .008).

Next, I ran the data for the scores in the element of paraphrasing. For this data set, the Box's M Test result was significant, Box's M (56.77), p (.000) < .001. That meant there might be some differences among covariance matrices. Thus, Pillai's Trace test was chosen for reporting the MANCOVA result. Pillai's Trace test results showed that the MANCOVA test was significant (Pillai's Trace = .12, F(4, 270) = 4.44, p < .05, Partial Eta Squared = .062). Because the MANCOVA test was significant, the examination of between-subject effects was necessary. According to the Levene's test, this set of data did not show homogeneity of error variance of the post-assessment regarding the element of paraphrasing across groups, $F_{mid\text{-}assessment}$ (2, 136) = 1.37, p > .05 and $F_{post\text{-}assessment}$ (2, 136) = 35.83, p < .05. Thus, the test results of between-subject effects for post-assessment regarding the element of paraphrasing should be used with caution. According to the test results of between-subject effects, there was no significant difference found in mid-assessment scores regarding the element of paraphrasing across groups F(2, 135) = .15, p > .05, Partial Eta Squared = .002). However, there was a significant difference in post-assessment scores regarding the element of paraphrasing across groups (F(2, 135) = 9.46, p < .05, Partial Eta Squared = .123). After multiple

group-by-group comparisons regarding the element of paraphrasing (see Table 5), a

significant difference was found in post-assessment scores between Groups A ($M = 3.83$,

$SD = .47$) and B ($M = 3.06$, $SD = 1.24$) ($p < .05$), and Groups B ($M = 3.06$, $SD = 1.24$)

and C ($M = 3.80$, $SD = .54$) ($p < .05$). See Figure 2 for the score change from the pre-,

mid- to post-assessments regarding the element of paraphrasing.

Table 5

Comparison between Groups on the Element of Paraphrasing

Paraphrasing	Group	Compared to	Mean Difference	Sig.
Mid-Assessment	A	B	.06	1.00
		C	-.03	1.00
	B	A	-.06	1.00
		C	-.08	1.00
	C	A	.03	1.00
		B	.08	1.00
Post-Assessment	A	B	.70	.00*
		C	.05	1.00
	B	A	-.70	.00*
		C	-.65	.00*
	C	A	-.05	1.00
		B	.65	.00*

* $p < 0.05$
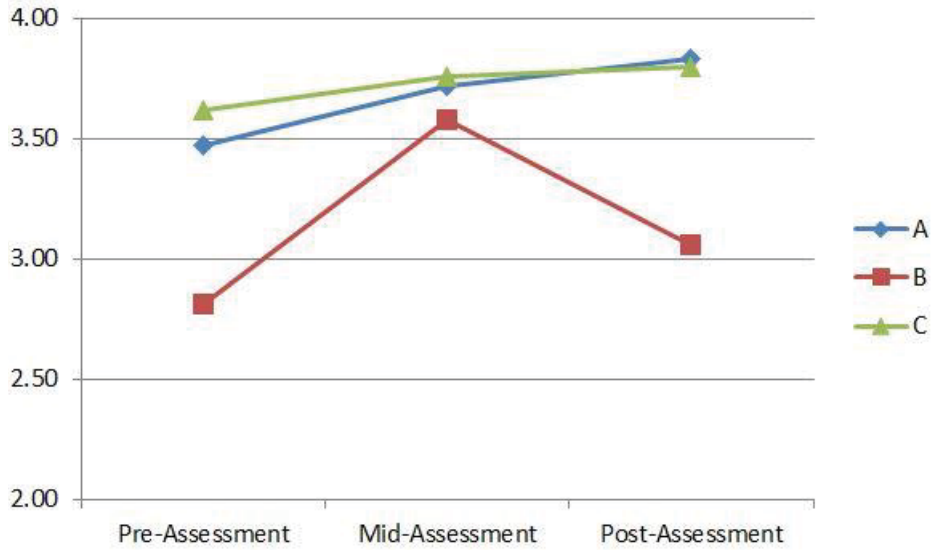
Figure 2. The Score Change from the Pre-, Mid- to Post-Assessments Regarding the Element of Paraphrasing.

Next, I looked at the element of focus. With these data, the Box's test result indicated that Box's M (25.79) was significant, $p < .001$, which meant there might be some differences among covariance matrices. Thus, Pillai's Trace test was chosen to run the MANCOVA test. Pillai's Trace results showed that MANCOVA test was significant (Pillai's Trace = .11, $F(4, 270) = 3.76$, $p < .05$, Partial Eta Squared = .053). Because the MANCOVA test was significant, the test results of between-subject effects had to be examined. According to the Levene's test, this set of data did not show homogeneity of error variance of both mid- and post-assessments regarding the element of focus across groups, $F_{mid-assessment}$ (2, 136) = 3.65, $p < .05$ and $F_{post-assessment}$ (2, 136) = 18.51, $p < .05$. Thus, the test results of between-subject effects for mid- and post-assessments on the element of focus should be used with caution. According to the test results of between-subject effects, a significant difference was found in mid-assessment scores regarding the element of focus across groups ($F(2, 135) = 3.56$, $p < .05$, Partial Eta Squared = .050).

The group-by-group comparisons for the mid-assessments on the element of focus showed a slight tendency toward significant differences between Groups A (M = 2.268, SD = .74) and C (M = 2.50, SD = .74) (.1 > p > .05), and Groups B (M = 2.17, SD = .51) and C (M = 2.50, SD = .74) (.1 > p > .05). If the sample size was larger, a more significant difference may show. There was also a significant difference in post-assessment scores regarding the element of focus across groups ($F(2, 135)$ = 6.42, p < .05, Partial Eta Squared = .087). The group-by-group comparisons of post-assessment scores on the element of focus showed a significant difference between Groups B (M = 2.22, SD = .49) and C (M = 2.86, SD = .99) (p < .05) (see Table 6). There was also a slight tendency toward significant differences between Groups A (M = 2.55, SD = .87) and C (M = 2.86, SD = .99) (.1 > p > .05). If the sample size was larger, a more significant difference may show. See Figure 3 for the score change from the pre-, mid- to post-assessments regarding the element of focus.

Table 6

Comparison between Groups on the Element of Focus

Focus	Group	Compared to	Mean Difference	Sig.
Mid-Assessment	A	B	.02	1.00
		C	-.31	.07
	B	A	-.02	1.00
		C	-.33	.08
	C	A	.31	.07
		B	.33	.08
Post-Assessment	A	B	.26	.47
		C	-.38	.08
	B	A	-.26	.47
		C	-.64	.00*
	C	A	.38	.08
		B	.64	.00*

*$p < 0.05$
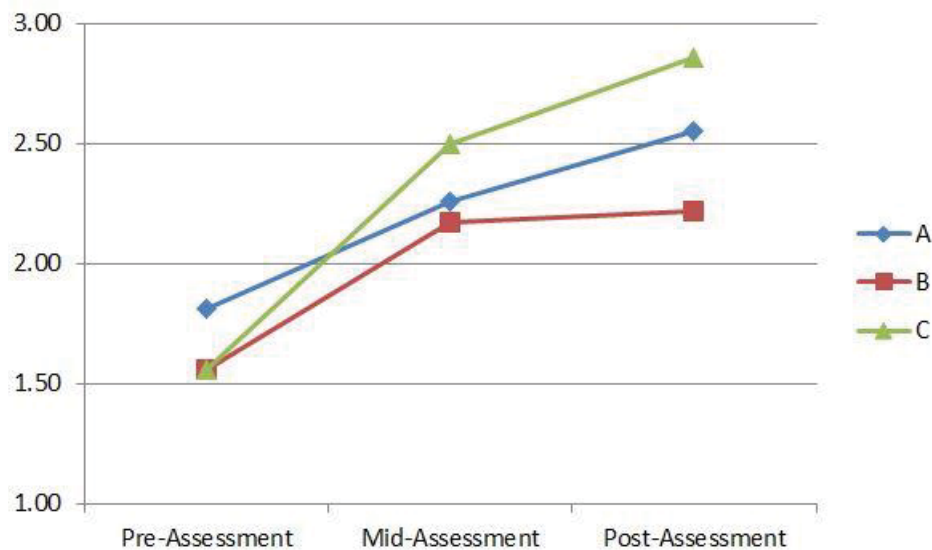
Figure 3. The Score Change from the Pre-, Mid- to Post-Assessments Regarding the Element of Focus.

The last element in the rubric was conventions. When I ran the data for the element of conventions, the Box's test was not significant, *p* (.378) >.001. This meant there was no significant difference between the covariance matrices, so the assumption of

MANCOVA was not violated and the Wilks' Lambda test was appropriate to use for the MANCOVA test. The Wilks' Lambda test results showed the MANCOVA test was significant (Wilks' = .91, $F(4, 268) = 3.17$, $p < .05$, Partial Eta Squared = .045). Because the MANCOVA test was significant, it was necessary to examine the between-subjects effects. The Levene's Test of Equality of Error Variances was not significant, $F_{mid-assessment}(2, 136) = .02$, $p > .05$ and $F_{post-assessment}(2, 136) = 1.01$, $p > .05$; that meant the error variances of both mid- and post-assessment regarding the element of conventions were equal across groups. According to the test result of between-subjects effects, there was no significant difference found in convention use in mid- assessment scores across groups ($F(2, 135) = .22$, $p > .05$, Partial Eta Squared = .003). However, there was a significant difference in convention use in post-assessment scores across groups ($F(2, 135) = 4.92$, $p < .05$, Partial Eta Squared = .068). After multiple group-by-group comparisons on the element of conventions (see Table 7), a significant difference was found in post-assessment scores between Groups B ($M = 2.06$, $SD = 1.09$) and C ($M = 2.88$, $SD = .98$) ($p < .05$). There was also a slight tendency toward significant differences between Groups A ($M = 2.47$, $SD = 1.15$) and C ($M = 2.88$, $SD = .98$) ($.1 > p > .05$). If the sample size was larger, a more significant difference may show. See Figure 4 for the score change from the pre-, mid- to post-assessments regarding the element of conventions.

Table 7

Comparison between Groups on the Element of Conventions

Conventions	Group	Compared to	Mean Difference	Sig.
Mid-Assessment	A	B	.11	1.00
		C	.13	1.00
	B	A	-.11	1.00
		C	.03	1.00
	C	A	-.13	1.00
		B	-.03	1.00
Post-Assessment	A	B	.20	1.00
		C	-.47	.07
	B	A	-.20	1.00
		C	-.67	.01*
	C	A	.47	.07
		B	.67	.01*

* $p < 0.05$
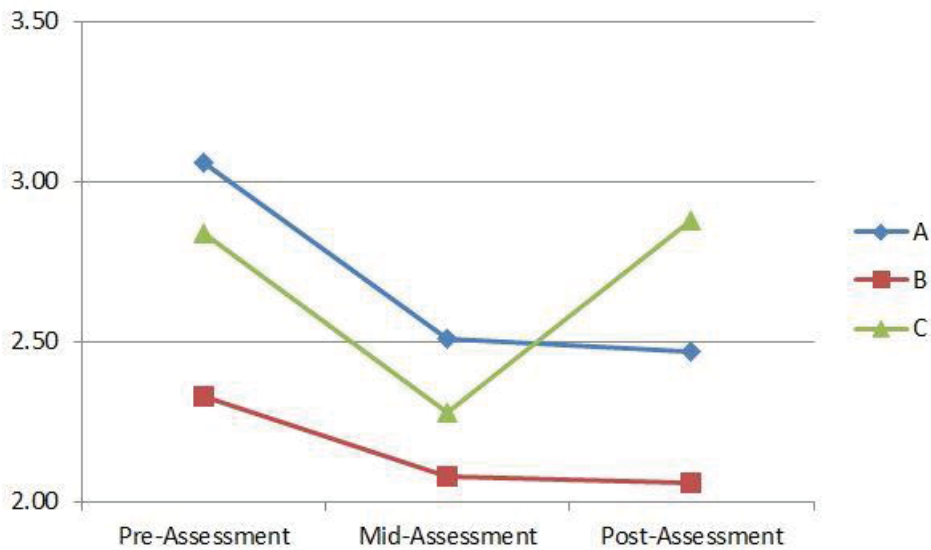
Figure 4. The Score Change from the Pre-, Mid- to Post-Assessments Regarding the Element of Conventions.

Research Question 2: Patterns in Length and Quality of Student Summaries

Data for Research Question 2 came from a content analysis of student summaries on the pre-, mid-, and post-assessments. Five high achievers and five low achievers from

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each group (A, B, and C) were selected, and their summaries were pulled for analysis. I removed student names and provided codes in the form of the group number, whether the student was a high achiever or low achiever, and then gave a number by order of analysis. Thus, the first high achiever (HA1) from group one (G1) whose scores were analyzed was given the code *G1HA1*, and the next high achiever from the same group would be *G1HA2*. I recorded the students' scores for each element on each assessment. Then, I noted the differences from one summary to another; for example, why did one student's pre-assessment summary score a "1" in paraphrasing, and the mid-assessment score a "3"? Because quantitative analysis for each rubric element showed no significant difference with the elements of length and accuracy, I focused the content analysis more on the other elements.

Paraphrasing

When the quantitative data were completed for the element of paraphrasing, a significant difference was found in post-assessment scores between Groups A (*M* = 3.83, *SD* = .47) and B (*M* = 3.06, *SD* = 1.24) (*p* < .05), and Groups B (*M* = 3.06, *SD* = 1.24) and C (*M* = 3.80, *SD* = .54) (*p* < .05). When I analyzed student summaries for these data by noting differences in the amount of paraphrasing present, I did see that all students in Groups A and C utilized less wording from the original text in the post-assessment, improving their scores from the pre-assessment to the post-assessment. For example, on the pre-assessment, student G1HA1 wrote "In 1993 Kim Stanley Robinson published Red Mars the first book in his trilogy" and the first sentence in the original text stated "In 1993 science fiction writer Kim Stanley Robinson published Red Mars, the first of his Mars trilogy." On the post-assessment, however, the student did not take more than four

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words in a row from the original text at any point, more effectively paraphrasing the text. However, while all of the high achievers from Group B either improved their paraphrasing or stayed the same (if the original score was a "4"), two of the low achievers stayed the same, one student (G2LA1) regressed, and only two low achievers improved. All but one student in Group A made the highest possible score in the area on the post-assessment, and all of the students in Group C made the highest possible score in the area of paraphrasing on the post-assessment. Two of the low achievers from Group B (G2LA1 and G2LA4) made the lowest possible score in the element of paraphrasing on the post-assessment. G2LA1 copied nine sections straight from the text on the post-assessment when very little was plagiarized on the pre-assessment. G2LA4 copied three sentences straight from the text on the post-assessment, although this is still an improvement over the eight sentences copied on the pre-assessment.

Focus

When I ran the quantitative data for the rubric element of focus, I found a significant difference between Groups B ($M = 2.22$, $SD = .49$) and C ($M = 2.86$, $SD = .99$) ($p < .05$) in the post-assessment. There was also a slight tendency toward significant differences between Groups A ($M = 2.55$, $SD = .87$) and C ($M = 2.86$, $SD = .99$) ($.1 > p > .05$). When looking at the student summaries, one pattern that emerged was wide-spread focus on small details on the pre-assessment. Many students in all groups focused on minor details on the pre-assessment, such as the content of the book trilogy mentioned rather than the major idea that the idea of space exploration has been around for centuries. Out of the 30 student summaries analyzed, only one student (G1HA1) focused primarily on the main ideas during the pre-assessment; all of the other

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students focused mainly on minor details, mentioning only a few major ideas from the text. For Group A, three students' scores were the same on the pre- and post-assessments, and the other seven improved. One student who made a large improvement was student G1HA4, who missed many main ideas on the pre-assessment, scoring a "1" in the element of focus, but on the post-assessment scored a "4" in the element because she switched her focus to only the main ideas. In Group C, two students did not improve nor regress in the area of focus, but the other eight did improve, focusing more on major ideas and less on minor details. An example of a student who scored the same on the pre- and post-assessments would be student G3LA2, who, like many students focused on the contents of the book trilogy on the pre-assessment, and also included the detail "photosynthesis produces carbohydrates" in her summary of the text on the Ecosystem in the post-assessment. In Group B, only six students improved and the other four performed the same on the pre- and post-assessments, still focusing more on minor details than major ideas. For example, student G2LA1 focuses almost his entire pre-assessment summary on the going to Mars, and still focuses on details such as "lions, tigers, and bears are carnivores" during the post-assessment. Students who scored the same on the pre- and post-assessments from Group B focused primarily on information such as the order of consumers in an eco-pyramid (G2HA5) and details of energy use (G2HA2).

<div align="center">*Conventions*</div>

The final rubric element was conventions, including spelling, punctuation, and grammatical errors. When the quantitative data were run for this rubric element, a significant difference was found in post-assessment scores between Groups B ($M = 2.06$,

SD = 1.09) and C (*M* = 2.88, *SD* = .98) (p < .05). There was also a slight tendency toward significant differences between Groups A (*M* = 2.47, *SD* = 1.15) and C (*M* = 2.88, *SD* = .98) (.1 > p > .05).When I looked at the errors in conventions by group, Group A did not have any students whose conventions scores improved from the pre- to the post-assessment. Group B had several students whose number of conventions stayed about the same, and only two students who improved their use of conventions from the pre-assessment to the post-assessment. Group C, therefore, had the most students who were more careful with conventions on the post-assessment. Five students, two high achievers and three low achievers, in Group C improved their conventions score from the pre- to the post-assessment. For example, student G3LA5 had five spelling errors in her pre-assessment, but only one error in her post-assessment. Spelling errors were the most common type of error across groups.

Research Question 3: Seventh-Grade Teacher Perceptions about Student Performance on

Collaborative GIST Summary Writing

Data for Research Question 3 came from teacher reflective journals, which teachers of Groups B and C maintained throughout the unit and from interviews with the teachers after the unit was completed. The researcher was also the teacher of Group A, and this study took place in my seventh year of teaching. The researcher used a wiki in class once before, as an eighth grade gifted ELA teacher 2 years prior to the study. The other two teachers who participated in this study were both second-year ELA teachers. The teacher of Group B had also completed a long-term substitute position in ELA before she became a full-time teacher. Neither of these two teachers had ever used a wiki or

heard of the GIST strategy before they were introduced to this study. See Table 8 for

details.

Table 8

Teacher Profiles

Teacher	Gender	Experience in 7th ELA at time of unit	GIST experience	Wiki experience
Group A	Female	4 years	None	1 year in 8th gifted ELA
Group B	Female	2 years	None	None
Group C	Female	1.5 years	None	None

In terms of student performance, both teachers' journals and interviews reflected a

perception of student progression through the unit. Once I coded the teacher reflective

journals and teacher interviews, themes that arose from their words included their

perceptions about the challenges encountered when using the GIST strategy, the GIST

strategy building on prior knowledge, the improvement of scores with the progression of

the unit, and growth in collaboration as the unit progressed.

Challenges Encountered when using the GIST Strategy

At the beginning of the instruction, the use of the GIST strategy seemed a bit

difficult for students. According to teachers' journals, both teachers described the first

lesson as being somewhat difficult for students although they seemed to understand the

strategy as they completed the whole-class summary. For example, the teacher of Group

B stated, "My students were very hesitant at first. Many thought the strategy was

confusing at first. However, they seemed to understand the strategy a bit more after

guidance."   In addition, students were struggling to utilize the strategy within their

groups. Group B's teacher mentioned in her journal that students struggled to understand

individual roles and agree on what the summary should say. Her journal said, "The students spent a lot of time talking to each other about what they were supposed to do." Group C's teacher also mentioned how frustrated her students were getting about not being able to discuss the text aloud in Lesson One.   She said, "The students were overwhelmed in trying to take turns editing and making comments without talking."

Time and student interests were the possible factors affecting the use of GIST strategy. According to the journal data, both teachers believed that it did take time for students to learn the use of the GIST strategy. The teacher of Group B stated, "They were slow to understand at first, but seemed to follow as the lesson continued." According to the interview data, both teachers thought that student comprehension of the strategy improved over time and "by the last lesson and final assessment, they seemed to understand the strategy and what was expected of them" (Group B's teacher). In addition, during the interview both teachers reported that students did not seem very interested in the texts. Group B's teacher stated, "Many of the texts seemed to be 'over their heads.' I think because they were not able to understand and comprehend the texts completely, it hindered their ability to use the GIST strategy correctly." Similarly, Group C's teacher said, "My students were not very interested in the reading passages. When they became uninterested, they stopped reading for understanding, which affected their summaries."

Extra guidance was needed to help students use the GIST strategy. In teachers' journals, Group B's teacher reported that students were "hesitant at first," but "they seemed to understand the strategy a bit more after guidance." After guidance, students seemed to use the GIST strategy better and start to like it. Group C's instructor mentioned

in her journal that her students liked the GIST strategy and during the interview, she emphasized that "the strategy was pretty effective for most students."

One type of guidance provided in this study was reviewing summary strengths and weaknesses. Reviewing identified student weaknesses enhanced student progression. Lessons two through four began with a review of strengths and weaknesses from the previous group summaries. For lesson two, both teachers reported summary length, flow of ideas, and identifying the overall main idea of the text as weaknesses addressed. For lesson three, both teachers reported that length was discussed as a strength this time, but that the flow of ideas was still a weakness discussed in class. For Lesson 4, both teachers reported that fluidity had improved. However, Group B's summary lengths had regressed and had to be revisited in class, and Group C's teacher reported that they discussed proofreading because convention use was a weakness. Both teachers reported that students did seem to focus on correcting the weaknesses from the previous summaries addressed during whole-class instruction with the exception of Group C's final lesson, in which the teacher reported that students "asked how to spell words" but "did not do a good job at peer editing for mistakes."

Using the GIST Strategy Allowed Students to Build on their Prior Knowledge

According to the interview data, both teachers thought that using the GIST strategy allowed students to build on their prior knowledge. Group B's teacher explained that she felt students' building on prior knowledge of summaries was a benefit: "benefits were that because they knew how to summarize, they understood what the end result should be. If their end product was just as long or used the same wording as the original text, using their prior knowledge they knew they had not used the summarization strategy

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correctly." Group C's teacher also felt that the GIST strategy built on students' prior knowledge, saying, "I think the GIST [strategy] helped students understand summarizing better" and "Students were able to locate main ideas more accurately."

Teachers Believed that Student Scores of Summary Writing Improved with the

Progression of the Unit

Teachers also believed that student scores of summary writing improved with the progression of the unit. In Lesson 1, both teachers reported that they believed student summaries were sub-par, or would not receive very good grades. For each of the following lessons, both teachers reported that they felt student summaries would show improvement and score a little better with the final group summary being the students' best scores on group lessons. On Lesson 1, Group C's teacher said, "I think summaries will be sub-par. Students are going to struggle with the flow of ideas between individual summaries," and Group B's teacher said, "I think summaries will not receive a very good grade. I believe my students were more worried about finishing in a hurry than producing a good product." However, on the final lesson, Group B's teacher stated, "I believe the summaries will show great improvement across the board," and Group C's teacher said, "I think these should be the best summaries thus far because there was less technical language, and students have been practicing and improving."

Collaboration Improved as the Unit Progressed

According to both journal data and interview data, both teachers reported growth in collaboration. From teachers' journals, teachers reported that students seemed to have more problems working together in Lesson 1 and they could not produce productive conversations. Group B's teacher stated that, "The students spent a lot of time talking to

each other about what they were supposed to do" rather than actually doing it and said, "The conversations were not very productive." Group C's teacher had a similar experience, saying, "Some groups argued over changes that needed to be made. For instance, one low level student [low achiever] would not listen/change his 15-20 word summary after discussing errors with a higher level student" and "The students were more focused on finishing their own summary [section] than helping one group member combine the individual chunked summaries."

However, in Lessons 2, 3, and 4, collaboration improved as the unit progressed and conversations became more purposeful. The growth in productivity of conversations was more obvious in Group B. Group B's teacher reported that after Lesson 2, "Students seemed confused, making the conversations unproductive. Students argued a lot about what they needed to be doing." However, after Lesson 3, "students understood the information better, therefore the process of writing the summary seemed to be a lot easier. The conversations seemed to be more productive." After Lesson 4, she reported that, "Students discussed the content and wrote their summaries a lot faster than previously. This allowed them to finish faster, but also caused them to forget to read back over the summary to make sure the ideas flowed." For Group C, the teacher also reported seeing a little growth in productivity of conversations.

Although collaboration improved as the unit progressed, both teachers did see that some problems existed in the collaboration process. From the journal data, Group C's teacher found out that students were able to work together to produce summaries, but some of the students cared more about getting their individual chunks done. For lesson two, she reported "They were productive; however, some students did not help combine

the summaries." After Lesson 3, she said, "Students focused more on getting their individual chunks done versus collaborating on how to make them flow and peer editing." Lastly, after Lesson 4, she stated that, "Students still were more concerned with their individual chunks than the entire summary as a whole. Conversations were more about where to chunk and how to split up the chunks than the summary itself."

Both teachers thought working as a group helped low achieving students more. In the interview data, Group B's teacher said she "saw that many students did not want a low grade on the assignments, so they ended up doing other members' work." Group C's teacher also said, "Low kids got help from the higher students in the group but the higher kids felt like they had to carry the majority of the weight." See Appendix N for teacher reflective journals, and see Appendix O for teacher interview transcripts.

Research Question 4: Seventh-Grade Student Perceptions about Their Performance on Collaborative GIST Summary Writing

Data for Research Question 4 came from student interviews, which I performed after the conclusion of the unit. I interviewed six students, one high achiever and one low achiever from each group (A, B, and C). The questions for the interview focused on understanding of the strategies used, collaboration, and GIST word limit. From student responses, the themes that emerged included (a) most of the students understood the use of the assigned strategy, (b) students had different perceptions of the word limit when using the GIST strategy, and (c) students perceived the helpfulness of collaboration. See Table 9 for student background information.

Table 9

Background Information on Students Interviewed

Group	Student	Age	Ethnicity	Gender
A	High achiever	13	African American	Female
	Low achiever	13	Caucasian	Male
B	High achiever	13	Hispanic	Female
	Low achiever	13	African American	Female
C	High achiever	13	Asian	Female
	Low achiever	13	Caucasian	Male

Most of the Students Understood the Use of the Assigned Strategy

Most of the students reported that they understood how to use the assigned strategy. Both students from Group A (collaborative traditional) and both students from Group C (collaborative GIST with technology) reported a good understanding of the strategies they used. The high achiever from Group A (collaborative traditional) said, "I think I understood the strategy pretty well." The low achiever from Group C stated, "Well, when we were writing, I thought I understood it okay, 'cause, when I was writing it, I could think of the words, what to say, (pause) and what to write." The low achiever from Group B (collaborative GIST only) also reported a good understanding, but the high achiever from Group B said that she only somewhat understood the GIST strategy. Specifically, she said, "it was easy to me, but, like, when I had to work on it by myself for the essay [post-assessments], it was kind of difficult."

Students Had Different Perceptions of the Word Limit When Using the GIST Strategy

It seemed that students had different perceptions of the 15-word limit per 'chunk' of text when using the GIST strategy. High achievers did not like the idea of having a word limit because they tended to write more and wanted to write freely; however, the

GIST requires no more than 15 words for each section of the text that is chunked together. The high achievers from both groups reported that they thought the word limit was harmful. The high achiever from Group B stated, "I didn't like that part 'cause, like, I like to go into detail when I write, so I would've preferred to write more." Similarly, the high achiever from Group C said, "I think it made it harder because I had to limit the amount of what I had to write, and I'm usually better at writing when I can write freely, so I think it was harder." However, low achievers tended to keep neutral or like the word limit because it may help them write more. The low achiever from Group B supplied a neutral response, saying, "I kinda liked it, but at the same time I didn't. Because, like, I like writing, I, like, write a whole bunch. I don't like writing just a limit." The low achiever from Group C reported the word limit as helpful, saying, "I think it affected it pretty good because it helped me on writing more than I would."

Students Perceived the Helpfulness of Collaboration

From the interviews, it seems like students did perceive the helpfulness of collaboration. All of the students reported that completing the lessons with a group was helpful because they were able to get assistance from their peers. For example, the high achiever from Group A responded, "I think the group work had a good effect because it allowed me to, like, see things from different points of view, and then, also, finding more details that maybe I would have left out, so it, like, helped me to really look." The low achiever from Group B stated, "I think I did better because other people could understand it, and they could help when they read over it, like, tell me what I did wrong in the lessons…I thought about when they helped me and how they helped me." The high achiever from Group C did not like to work in a group, however, when she used the GIST

strategy more within her group, she liked it better. She stated, "honestly, I didn't really like working with my group, and it was really confusing for me, but it helped me in the way that I had to be the one that had to use the strategy the most, um, because my group didn't really understand it. So, I had to use it more than they did, when I was doing it individually, I liked it better and I knew what to do." See Appendix P for student interview transcripts.

Research Question 5: Seventh-Grade Teacher and Student Perceptions about

Collaborative GIST Summary Writing with Technology

Data for Research Question 5 came from Group C's teacher reflective journal, the interview with the teacher of Group C, and student interviews. As I analyzed these sources, emerging themes were that students had difficulties in learning with technology and most of the students had negative perceptions of technology's impact on their academic success with summary writing.

Students Had Difficulties in Learning with Technology

In her journal reflection of Lesson 1, the teacher of Group C described the negative experience of trying to implement the GIST strategy while having students talk only through technology. After she stated that students seemed to understand the GIST strategy, the teacher added, "However, they were not able to complete the summary on the wiki. The students were overwhelmed in trying to take turns editing and making comments without talking." She mentioned that, "The wiki will not work for my classes. Students were overwhelmed because they could not talk about where to chunk the text. Otherwise, time is my only concern." She provided more details about the experience using technology (wiki) in Lesson 1 during the interview. Based on her

observations, it seemed that students were not able to work together and communicate well via the computer in the class. She said:

Technology negatively affected students' performance on the first lesson. Students did not like only being able to communicate via the computer. It was a challenge for students to help one another by simply making comments. They kept wanting to talk. Students expressed concerns for the amount of time it took. Also, some students would not make changes even after comments were made. I felt students would not benefit using technology for this unit. I was worried about the time constraint. I also hated them not being able to communicate at all. I worried about students understanding the material when communication was so limited.

Most of the Students had Negative Perceptions of Technology's Impact

In the student interviews, all of the students except for the low achiever from Group C reported that they felt communicating only through technology would have been a bad idea. For example, the high achiever from Group A said

When you're talking to someone in person, you have, like, more details and like little comments that you wouldn't really have when you were talking through technology, and also, it allows you to look at something together, like, when you're sitting with them, it allows you to look at something together so you're really connected more.

Similarly, the low achiever from Group B said, "they couldn't help me in a way they could if they were sitting right in front of me. I like to talk about it." Only the low achiever from Group C mentioned that the computer helped him search questions he did

not know during the group work process. He said, "It would've helped a little bit cause I could've went on the computer and searched questions that I didn't know. I think it would have helped cause I'm a little slow on things and my group members could help me out if I needed it."

It seemed that most of the students preferred face-to-face conversation when working with others on summary writing. Again, all students except the low achiever from Group C responded that technology would have been a bad idea for the unit because there is a different purpose to the conversation. For example, the low achiever from Group A said, "If we would've got confused with something, and we weren't there to ask them, sometimes people don't know what to put into the thing to type enough to ask them" and "because we would not be able to explain the question and answer to each other so we understand it." The high achiever from Group C said, "My grades are a lot more important than talking to my friends about gossip. So if I wanted a good grade on something, I would probably want to talk face-to-face, just so I knew I was getting the right information. It's different when I'm talking to my friends through text because the meaning can go different ways when I'm not talking about school related things." The low achiever from Group C disagreed because he said that, "You can still talk to your group with the technology, so [it is] not too different." See Appendices N, O, and P for teacher reflective journals, teacher interview transcripts, and student interview transcripts, respectively.

Chapter V

CONCLUSIONS

I present a summary of the study, discussions of the findings and important conclusions based on the data presented in Chapter 4. This was a mixed-methods study which sought to determine how collaborative practice utilizing different instructional strategies would impact students' individual performance on summary writing. Student scores on independent pre-, mid-, and post-assessments were collected and analyzed to determine disparities among groups. Student summaries, teacher journals, and teacher and student interviews were coded and analyzed to determine factors impacting the difference in student assessment scores and teacher and student perceptions about student performance on collaborative GIST summary writing.

Summary and Discussion

Analysis of quantitative data for Research Question 1 uncovered a significant difference in post-assessment scores between Groups B (collaborative GIST only) and C (collaborative GIST with technology), with Group C having the highest scores. Because the GIST strategy was used in both Groups B and C and technology was only used in Lesson 1 in Group C, it was hard to draw a conclusion that technology had a positive impact on student performance in this study even though a significant difference in post-assessment scores was found between Groups B and C. In addition, based on Group C's teacher's observations and students' responses in the interviews, technology used in this study did not really help with student performance on collaborative summary writing. Therefore, one possible explanation for the significant differences found between Groups

B and C was that Group B contained more low achievers than the other two groups (A and C). Students in Group B had the lowest scores on the pre-assessment and their performance kept staying lowest on the mid- and post-assessments even though a MANCOVA test was already used to statistically control the effect of pre-assessment. In addition, no significant difference was found in post-assessment scores between collaborative traditional summarization group (A) and the collaborative GIST groups (B and C), but there was a slight tendency toward significant differences in post-assessment scores between Groups A and B, and Groups A and C. Therefore, if the sample size was larger, a more significant difference between the collaborative traditional summarization and the collaborative GIST strategies may be evident. The positive impact of the GIST strategy on collaborative summary writing was shown in the findings for Research Questions 2, 3 and 4. Thus, like previous GIST studies performed by Cunningham (1982), Bean and Steenwyk (1984), and Braxton (2009), the GIST strategy did have a positive impact on student summary writing.

A further quantitative analysis by rubric element showed no differences in length and accuracy across groups. Thus, it was important to note that neither strategy, collaborative traditional nor collaborative GIST, produced summaries that were more accurate than the other. The analysis of other rubric elements indicated a) significant differences between Groups B and C in the elements of paraphrasing, focus, and conventions, (b) significant differences between Groups A and B on paraphrasing, and (c) a slight tendency toward significant differences between Groups A and C on focus and conventions.

The results of content analysis from student summary writing samples provided more details about the above-mentioned quantitative results. Summaries written by 30 students, five high achievers and five low achievers per group (A, B and C) were analyzed. For the element of paraphrasing, all students from Groups A and C included less wordage taken directly from the original source in the post-assessment, which improved their scores for paraphrasing. In Group B, three high achievers and two low achievers also improved their paraphrasing of the text, but two high achievers and two low achievers scored the same, indicating the same amount of plagiarism in the post-assessment as was in the pre-assessment. Finally, one low achiever even plagiarized more material, resulting in a lower paraphrase score on the final assessment than the pre-assessment. This is important because, as stated by Frey et al. (2003), "the ability to summarize text accurately and efficiently without plagiarizing is a core competency for other writing genres" (p. 44).

Content analysis of student focus revealed that 8/10 students from Group C learned to focus more on main ideas and less on minor details between the pre- and post-assessments while only 7/10 of students from Group A, and 6/10 of students from Group B learned the same lesson. Content analysis of student use of conventions showed that Group C had the highest number of students (five) from those analyzed who improved their spelling, grammar, and punctuation on the post-assessment. The teacher of Group C discussed conventions as a weakness on students' last group lesson, so students had recently been working on improving conventions prior to the post-assessment.

Analysis of qualitative data for Research Question 3 showed that teachers felt that there were challenges as well as benefits to using the GIST strategy. Time to complete

the lessons and student interests in the texts were the concerns found in teacher journals. They may be the factors impacting the use of the GIST strategy. Teachers indicated that extra guidance was needed to help students understand the strategy as it was difficult at first. One form of guidance provided was feedback on group summaries in the form of reviewing student strengths and weaknesses from the previous lessons' summaries. For the feedback provided in Lessons 2 through 4, teachers indicated that students did seem to take the information into account, and teachers felt that student summaries improved in those areas of weakness addressed on the next summary. Black and Wiliam (1998) reported that providing students with formative feedback enhanced academic achievement, particularly for low achievers because such feedback helped students recognize how and why they should modify their work.

Teacher interviews indicated both teachers felt that the GIST built on prior knowledge, and this was a benefit of the strategy. Chen, Wong, and Wang (2014) conducted a study and stated that students with more prior knowledge outperformed students with less prior knowledge. Other research, such as that performed by Thompson and Zamboanga (2004), has also shown that students' prior knowledge has a positive impact on academic performance. Therefore, because it was building on prior knowledge, the GIST strategy was going to be more effective. Teachers felt at first that student summaries would score below expectations, but with each lesson, teachers indicated that they felt scores were slowly improving.

Similarly, teachers believed that student collaboration was lacking at first, with unproductive conversations in groups, but both teachers described an improvement in student collaboration over the course of the unit. Finally, teachers revealed that the

collaborative lessons made a larger impact on some students (suggesting the low achievers benefited more) than others. Topping, Smith, Swanson, and Elliot (2000) performed a study in which 12 postgraduate students participated in peer review for writing and found that student feedback implied a positive effect of peer review on their writing. Likewise, Jafari (2012) performed a study with 60 participants split into two groups, an independent writing task group and a collaborative writing task group. Groups completed four essays on the same topics and genres, but participants from the collaborative writing group performed better on writing tasks than the control group.

During student interviews, most students stated they understood their assigned strategy, and all of the students said they found the collaborative work during the lessons helpful. This finding was similar to Ayon's (2013) finding that most participants had a positive attitude toward collaborative learning. There was also an interesting finding related to the student perception of using the GIST strategy. That was their perception of the word limit. According to the data received, high achievers tended to write more and freely, so they did not like to have a word limit. In contrast, lower achievers thought having a word limit helped them write more.

As for technology, the teacher of Group C indicated the extreme difficulty she and her students faced when trying to implement the strategy with collaboration among group members coming solely through technology. This situation could have been related to the teacher's inexperience with wikis or the insufficient time allowed for technology use. Five out of the six students interviewed said that they felt using only technology to communicate with their group members during the unit would have been a bad idea. It seemed like in this study students preferred talking to each other face-to-face during the

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process of collaborative summary writing. Students specified that there was a different purpose for the conversations than when they were texting and using other technologies to communicate on a daily basis, and they wanted to make sure they could clearly understand their group members when the topic is academic. This was similar to the findings of Ocker and Yaverbaum (1999), whose results indicated that although asynchronous and face-to-face collaboration were similar in terms of effectiveness in learning, students were significantly more satisfied with face-to-face collaboration.

Conclusions

Although no significant differences were found in post-assessment scores between collaborative traditional summarization group (A) and the collaborative GIST groups (B and C), there was still evidence showing the effectiveness of the GIST strategy. For example, a slight tendency toward significant differences was found in post-assessment scores between Groups A and B, and Groups A and C. The MANCOVA analysis of rubric elements also revealed (a) a significant difference between Groups A and B on paraphrasing, and (b) a slight tendency toward significant differences between Groups A and C on focus and conventions. The pattern generated from the content analysis of student summaries also supported the quantitative results and provided the details. Based on the collected quantitative and qualitative data, the GIST strategy indeed had a positive impact on collaborative summary writing. For example, it helped students build on their prior knowledge when writing summaries and improve their scores. However, there were still some problems needed to be solved when using it. For example, time to complete the lessons and student interests in the texts were the concerns found in teachers' journals. These two factors should be considered when integrating the

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GIST strategy into summary writing instructions. In addition, according to student perceptions received, the GIST word limit may hinder high achievers' writing achievements and help low achievers to write more. Thus, increasing the word limit may be necessary if there are many high achievers in a course. Based on teachers' observations, extra guidance was necessary to help students utilize the GIST strategy. The feedback strategy used (i.e., reviewing student strengths and weaknesses from the previous lessons' summaries) in this study seemed to effectively help students make improvements on summary writing.

Collaboration had a positive impact on students' summary writing and was improved as the unit progressed. Both teachers and students stated collaborative summary practice was helpful, although teachers indicated low achievers might have benefited more from the collaborative practice than high achievers.

According to the findings in this study, technology use did not guarantee the increase on student interests and participation levels. Group C's teacher described a negative experience for her students when trying to communicate solely through the class wiki. Many students were frustrated and worried about finishing on time. Other students were uninterested and would not review peer comments and fix errors using technology (wiki). Students' perceptions indicated that communication solely through technology was not effective because they preferred to communicate face-to-face for academic products to ensure that they understood one another's meanings.

Recommendations for Future Research

The most important limitation to the current research was the sample size. This study utilized a convenience sample totaling 139 participants. Because results indicated a

slight tendency toward significant differences between the collaborative traditional

method and collaborative GIST groups (Groups B and C), a more significant result about

the impact of the GIST strategy may be found if the sample size was increased.

Another recommendation for future research is to provide more time for the unit.

Both teachers' journals indicated that time was a major concern for the unit. The teacher

of Group B described a desire to have more time to model the strategy before asking

students to produce group summaries. The teacher of Group C mentioned that the

technology difficulties also centered around time; she was worried students would not be

able to finish their work, and students were frustrated with the amount of time it was

taking for them to take turns editing the wiki, commenting, and editing again. If more

time was allowed for modeling lessons, perhaps students from Group B would have

performed at a higher level. Similarly, if more time had been built into the unit,

particularly for the group utilizing technology (Group C), the study may have shown

different results in the area of technology use.

An additional recommendation is that perhaps a flipped classroom approach

would allow for a more meaningful technology integration. If students were completing

the practice at home or at least not in the same classroom, then the technology piece may

be less frustrating as students have no choice but to communicate solely through

technology, whereas with this study, students were in the classroom together and simply

expected to communicate only through technology.

Finally, a study using a different research method is necessary to yield more

information about some of the findings. A qualitative study that includes observations

may provide more insight into the difficulties with technology or the amount and quality

of collaboration at any given time during the unit. Similarly, observations may allow the researcher to explore why low achievers seemed to benefit more from collaborative practice than high achievers.

<div align="center">Recommendations for Practitioners</div>

For teachers who may be interested in incorporating the GIST strategy into the classroom, I would recommend the following:

1. Provide more time for students to complete the lessons if they will be communicating solely through technology. In this study, only one class period was scheduled per lesson. Two class periods per lesson may be more appropriate to ensure that students do not feel rushed and/or stressed.

2. Provide extra guidance to meet students' needs. Some students were more confused about how to complete the summaries than others. Students may need more guidance to ensure that collaborative time is used productively.

3. Provide feedback after each lesson about the previous summaries' strengths and weaknesses. This seemed to benefit students in this study, and teachers found that students did try to work on the previous weaknesses as they worked on their current summary.

4. Allow for collaborative summary practice. Most students found the collaborative nature of the lessons in this study helpful, particularly the low achievers. Similarly, teachers felt that low achievers benefited more from the collaborative lessons than the high achievers. Furthermore, student collaboration improved as students worked through the lessons.

5. Consider increasing the word limit. The GIST strategy limits the writer to 15 words per section of text. However, students interviewed described the word limit as a hindrance to their writing because they typically prefer to write more. As a summary writing strategy, the purpose is to limit students to including only main ideas, but perhaps with longer texts, students will need more than 15 words per section.

Summary

I sought to determine how different instructional strategies for summary writing would impact student performance. Furthermore, content analyses were performed to determine any patterns that emerged in length and quality of student summaries. I also sought to understand teacher perceptions of student performance on collaborative GIST summary writing as well as student perceptions about their performance, and finally, teacher and student perceptions about collaborative GIST summary writing with technology.

Group A consisted of students practicing a traditional form of summarization writing; they hand-wrote a summary created from main ideas in the text. Group B contained students following the GIST summarization method to hand-write summaries. Finally, students in Group C were expected to follow the GIST strategy to create summaries, but rather than completing them in the traditional format of pen-and-paper, students were to work on a class wiki to create and post their summaries. However, after an attempt to utilize the technology failed due to time and student frustration levels, Group C followed the same format as Group B. This study followed an explanatory sequential mixed-methods design. After quantitative data (student overall assessment

scores and scores by rubric element) was collected, student summaries, teacher reflective journals, teacher interviews, and student interviews were analyzed to help explain the quantitative results and discover more details about the instructional strategies used. MANCOVA tests were used to analyze the data for Research Question one and content analyses were used to answer Research Questions 2, 3, 4 and 5.

Based on the MANCOVA results, no significant differences were found in post-assessment scores between collaborative traditional summarization (Group A) and the collaborative GIST groups (B and C). However, there was still some evidence showing the effectiveness of the GIST strategy. For example, a slight tendency toward significant differences in post-assessment scores was shown between Groups A and B, and Groups A and C. The descriptive data also revealed that students in Group C's had the highest post-assessment score and they out-performed Groups A and B on almost every rubric element. In addition, there was a significant difference found between Groups A and B on paraphrasing, and a slight tendency toward significant differences between Groups A and C on focus and conventions. The pattern generated from the content analysis of student summaries also supported the quantitative results. Therefore, based on the teachers' observations, the GIST strategy helped students build on prior knowledge when writing summaries and improve their scores. The findings also suggested that the following issues had to be addressed to help students use it: a) giving more time to complete the lessons, b) increasing student interests in the texts, c) increasing the GIST word limit, and d) offering extra guidance or feedback strategy.

Collaboration had a positive impact on students' summary writing. Both teachers and students believed that collaborative summary practice was helpful. However, it may benefit low achievers more.

Technology used in this study did not really help with summary writing. Both teacher and students reported negative experiences with it. More time and extra guidance should be given when integrating it into summary writing instructions.

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APPENDIX A:

Teacher Reflective Journal Prompts

The following questions are a guide only. Include any thoughts/experiences you deem appropriate and/or relevant:

Lesson One:

How well did students seem to understand the strategy for summarizing?

What concerns/reservations do you have, if any?

How did most students seem to respond to the strategy?

When placed into small groups for collaborative summaries, how well did students work together?

How productive were the conversations regarding the summaries?

Were there any observations that seemed significant that you have not already discussed? If so, what would you like to add?

Lessons Two - Four:

What strengths/weaknesses were addressed during whole-class instruction?

Did students seem to take the feedback into account when creating a summary for today's text?

When placed into small groups for collaborative summaries, how well did students work together?

How productive were the conversations regarding the summaries?

Were there any observations that seemed significant that you have not already discussed? If so, what would you like to add?

APPENDIX B:

Teacher Interview Questions

Teacher Interview Questions

- What were the benefits and challenges of teaching with GIST?
- How well did students seem to understand the GIST strategy?
- Was the strategy effective?
- How could it be improved?
- Was it effective for getting students interested?
- How do you think working as a group for lessons impacted student performance on individual assessments?
- What type/types of growth do you think students experienced through this unit?
- Teacher of Group C– How did the technology affect student performance on lesson 1? Why did you feel that it was not in the students' best interest to continue using technology for the remainder of the summaries?

APPENDIX C:

Student Interview Questions

Student Interview Questions

- How well do you think you understood the strategy you used when writing your summaries?

- How do you think working with a group for the lessons affected your work on the individual summaries?

- How do you think technology would have affected your summaries?

- You guys always use technology! You are constantly texting each other even if the person is across the room from you instead of talking. So how is this different?

- (GIST students) How do you think that having a certain number of words (15 words for each section) affected the way you wrote your summary? Do you think it made it easier, harder, etc.?   Why?

- Is there anything that I did not ask about that you would like to add?

APPENDIX D:

Institutional Review Board Approval and Consent Forms

Institutional Review Board Approval

Institutional Review Board (IRB)
for the Protection of Human Research Participants

NEW PROTOCOL APPROVAL

PROTOCOL NUMBER: IRB-03133-2014   RESPONSIBLE RESEARCHER: **Sarah Lashley**

PROJECT TITLE: **Collaborative Summary Writing Three Ways: A Mixed Mehods Analysis**

APPROVAL DATE: **12/9/14**   EXPIRATION DATE: **12/9/15**

LEVEL OF RISK: ☒ Minimal   ☐ More than Minimal

TYPE OF REVIEW: ☒ Expedited Under Catetory/ies : 7   ☐ Convened (Full Board)

CONSENT REQUIREMENTS:
- ☒ Adult Participants – Written informed consent with documentation (signature)
- ☐ Adult Participants – Written informed consent with waiver of documentation (signature)
- ☐ Adult Participants – Verbal informed consent
- ☐ Adult Participants – Waiver of informed consent
- ☐ Minor Participants – Written parent/guardian permission with documentation (signature)
- ☐ Minor Participants – Written parent/guardian permission with waiver of documentation (signature)
- ☐ Minor Participants – Verbal parent/guardian permission
- ☐ Minor Participants – Waiver of parent/guardian permission
- ☐ Minor Participants – Written assent with documentation (signature)
- ☐ Minor Participants – Written assent with waiver of documentation (signature)
- ☐ Minor Participants – Verbal assent
- ☐ Minor Participants – Waiver of assent
- ☐ Waiver of some elements of consent/permission/assent

APPROVAL: This research protocol is approved as presented. If applicable, your approved consent form(s), bearing the IRB approval stamp and protocol expiration date, will be mailed to you via campus mail or U.S. Postal Service unless you have made other arrangements with the IRB Administrator. Please use the stamped consent document(s) as your copy master(s). Once you duplicate the consent form(s), you may begin participant recruitment. Please see Attachment 1 for additional important information for researchers.

COMMENTS: NONE

Lorraine Schmertzing   12/9/14   *Thank you for submitting an IRB application.*

Lorraine Schmertzing, Ed.D., IRB Chair   Date   *Please direct questions to irb@valdosta.edu or 229-259-5045.*

Form Revised: 12.13.12

Consent Form for Instructors

VALDOSTA STATE UNIVERSITY
Consent to Participate in Research

You are being asked to allow your students to participate in a research project entitled "An Investigation of Student Collaborative Summary Writing in Three Modes of Instructional Strategies." This research project is being conducted by Sarah Lashley, a student in the department of Curriculum, Leadership, and Technology at Valdosta State University. The researcher will explain to you in detail the purpose of the project, the procedures to be used, and the potential benefits and possible risks of participation prior to the research. You may also ask the researcher any questions you have to help you understand this project and your possible participation in it. A basic explanation of the research is given below. Please read this carefully and discuss with the researcher any questions you may have. The University asks that you give your signed agreement if you wish to participate in this research project.

Purpose of the Research: The purpose of the research project is to determine the effectiveness of three modes of instructional strategies. One group of classes will locate main ideas to write summaries while two groups of students will use a strategy called the GIST method to create summaries. Students will work collaboratively on a wiki or in groups with pen and paper.

Procedures: As an instructor in this research project, you will teach summarization lessons according to lesson plans and scripts that the researcher provide. You will follow them exactly, and let the researcher know ahead of time of any questions you have or clarification that may be needed. As students work collaboratively during the lessons, you will maintain a reflective journal. Prompts will be provided, but you are free to add other information, and should also include any observations you've made that you consider important.

Possible Risks or Discomfort: Although there are no known risks associated with these research procedures, it is not always possible to identify all potential risks of participating in a research study. However, the University has taken reasonable safeguards to minimize potential but unknown risks. By agreeing to participate in this research project, you are not waiving any rights that you may have against Valdosta State University for injury resulting from negligence of the University or its researchers.

Potential Benefits: Although you may not benefit directly from this research, your participation will help the researcher gain additional understanding of effectiveness of three different modes of instructional strategies. Knowledge gained may contribute to addressing gaps in literacy instruction.

Costs and Compensation: There are no costs to you and there is no compensation (no money, gifts, or services) for your participation in this research project.

Assurance of Confidentiality: Valdosta State University and the researcher will keep your information confidential to the extent allowed by law. Members of the Institutional Review Board (IRB), a university

committee charged with reviewing research to ensure the rights and welfare of research participants, may be given access to your confidential information. Your reflections will be locked in a closet and only seen by the researcher and, as necessary, the researcher's dissertation committee members and VSU's IRB Review Board. Your name will be removed from the reflections and pseudonyms will be used in the report of findings.

Voluntary Participation: Your decision to participate in this research project is entirely voluntary. If you agree now to participate and change your mind later, you are free to leave the study. Your decision not to participate at all or to stop participating at any time in the future will not have any effect on any rights you have or any services you are otherwise entitled to from Valdosta State University. You may skip any questions that you do not want to answer. Should you decide to withdraw after data collection is complete, your information will be deleted from the database and will not be included in research results.

Information Contacts:
Questions regarding the purpose or procedures of the research should be directed to Sarah Lashley at 229-546-7187 or salashley@valdosta.edu. This study has been approved by the Valdosta State University Institutional Review Board (IRB) for the Protection of Human Research Participants. The IRB, a university committee established by Federal law, is responsible for protecting the rights and welfare of research participants. If you have concerns or questions about your rights as a research participant, you may contact the IRB Administrator at 229-333-7837 or irb@valdosta.edu.

Agreement to Participate: The research project and my role in it have been explained to me, and my questions have been answered to my satisfaction. I agree to participate in this study. By signing this form, I am indicating that I am 18 years of age or older. I have received a copy of this consent form.

I would like to receive a copy of the results of this study: _____ Yes _____ No

Mailing Address: _____

E-mail Address: _____

_____
Printed Name of Participant

This research project has been approved by the Valdosta State University Institutional Review Board for the Protection of Human Research Participants through the date noted below:

_____
Signature of Participant   Date

_____
Signature of Person Obtaining Consent   Date

Valdosta State University
Consent to Participate in Research – Page 2 of 2

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VALDOSTA STATE UNIVERSITY
Parent/Guardian Permission for Child's/Ward's Participation in Research

You are being asked to allow your child (or ward) to participate in a research project entitled "An Investigation of Student Collaborative Summary Writing in Three Modes of Instructional Strategies." This research project is being conducted by Sarah Lashley, a student in Curriculum, Leadership, and Technology at Valdosta State University. The researcher has explained to you in detail the purpose of the project, the procedures to be used, and the potential benefits and possible risks to your child (or ward). You may ask the researcher any questions you have to help you understand this study and your child's (or ward's) possible participation in it. A basic explanation of the research is given below. From this point on in this form, the term "child" is used for either a child or a ward. Please read the remainder of this form carefully and ask the researcher any questions you may have. The University asks that you give your signed permission if you will allow your child to participate in this research project.

Purpose of the Research: This study involves research. The purpose of the study is to determine the effectiveness of three modes of summary writing strategies. One group of classes will locate main ideas to write summaries while two groups of students will use a strategy called the GIST method to create summaries. Students will work collaboratively on a wiki or in groups with pen and paper.

Procedures: Your child will collaborate with classmates to complete summaries on nonfiction texts. Some students will be taught specific strategies and others will not. Some students will post their wikis online, and some students will not. All students must learn to write summaries and will be required to write summaries in class. However, your child's participation in the research will not be graded, and assessments will not count against students. Participation in the research summary strategies and activities is voluntary. Students will take pre-, midpoint, and post assessments and take part in instruction and practice over a five-week period. Students who do not participate will still be expected to write summaries for class, but may do so independently using the method of his/her choice.

Possible Risks or Discomfort: Although there are no known risks to your child associated with these research procedures, it is not always possible to identify all potential risks of participating in a research study. However, the University has taken reasonable safeguards to minimize potential but unknown risks.
By granting permission for your child to participate in this research project, you are not waiving any rights that you or your child may have against Valdosta State University for injury resulting from negligence of the University or its researchers.

Potential Benefits: Your child may benefit from participation in this study through enhanced summary writing skills. His/her participation will help the researcher gain additional understanding of the effectiveness of three different modes of summary writing strategies. Knowledge gained may contribute to addressing gaps in literacy instruction.

Costs and Compensation: There are no costs to you or your child and there is no compensation (no money, gifts, or services) for your child's participation in this research project.

Assurance of Confidentiality: Valdosta State University and the researcher will keep your child's information confidential to the extent allowed by law. Members of the Institutional Review Board (IRB), a university

committee charged with reviewing research to ensure the rights and welfare of research participants, may be given access to your child's confidential information. Any private information will be seen only by the ELA teacher, the researcher, and the VSU IRB committee assisting with the research. All summaries and information along with identifiable information will be locked in a closet until being reviewed. Reported data will not be associated with students by name or class. If your student's work is discussed in the report, pseudonyms will be used. The data collected from your child will be stored in a safe environment, and burned after five years.

Voluntary Participation: Your decision to allow your child to participate in this research project is entirely voluntary. If you agree now to allow your child to participate and you change your mind later, you are free to withdraw your child from the study at that time. By not allowing your child to participate in this study or by withdrawing him/her from the study before the research is complete, you are not giving up any rights that you or your child have or any services to which you or your child are otherwise entitled to from Valdosta State University. If you decide to withdraw the child from the study after data collection is complete, the child's information will be deleted from the database and will not be included in research results.

Information Contacts:
Questions regarding the purpose or procedures of the research should be directed to Sarah Lashley at 229-219-3234 or sarahlashley@lowndes.k12.ga.us. This study has been approved by the Valdosta State University Institutional Review Board (IRB) for the Protection of Human Research Participants. The IRB, a university committee established by Federal law, is responsible for protecting the rights and welfare of research participants. If you have concerns or questions about your child's rights as a research participant, you may contact the IRB Administrator at 229-333-7837 or irb@valdosta.edu.

Agreement to Participate: The research project and my child's (or ward's) role in it have been explained to me, and my questions have been answered to my satisfaction. I grant permission for my child to participate in this study. By signing this form, I am indicating that I am either the custodial parent or legal guardian of the child. I have received a copy of this permission form.

I would like to receive a copy of the results of this study: _____ Yes _____ No

Mailing Address: _____

e-mail Address: _____

This research project has been approved by the Valdosta State University Institutional Review Board for the Protection of Human Research Participants through the date noted below:

_____
Printed Name of Child/Ward

_____
Printed Name of Parent/Guardian

_____   _____
Signature of Parent/Guardian   Date
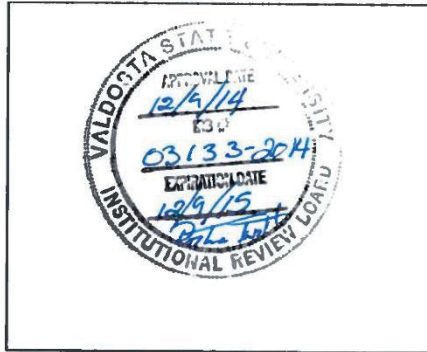
_____   _____
Signature of Person Obtaining Consent   Date

Valdosta State University
Permission for Child Participation in Research – Page 2 of 2

Parent/Guardian's Initials: _____

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Consent Form for Minors

I am willing to take part in the study called "An Investigation of Student Collaborative Summary Writing in Three Modes of Instructional Strategies". I understand that the researcher, Sarah Lashley, from Valdosta State University is hoping to determine the effectiveness of three modes of instructional strategies. I understand that I participate in lessons led by my teacher and write summaries both with a group of other students and by myself. This study will take place at Pine Grove Middle School and should take about 5 weeks of my time.

I am taking part because I want to. I have been told that I can stop at any time, and if I do not like a question, I do not have to answer it. No one will know which summaries are mine, except for my teacher, the researcher, and IF NEEDED, a few VSU faculty members. I understand that if my summary is discussed in a written report, different name will be used.

Name _____

Signature _____

Date: _____

Age: _____

Pine Grove Middle School

4159 River Road • Valdosta, Georgia 31605 • Telephone (229) 219-3234 • Fax (229) 219-3233

Ken Overman
PRINCIPAL

Ivy Smith
ASSISTANT PRINCIPAL

To whom it may concern,

Sarah Lashley has permission to complete her research project with 7th grade English classes at Pine Grove Middle School. If you have any questions, please do not hesitate to contact me.

Ken Overman
Principal

APPENDIX E:

Institutional Review Board Modification Approval and Consent Forms

Institutional Review Board (IRB)
for the Protection of Human Research Participants

PROTOCOL MODIFICATION APPROVAL

PROTOCOL NUMBER: IRB-03133-2015=4

INVESTIGATOR: Sarah Lashley

PROJECT TITLE:

Collaborative Summary Writing Three Ways: A Mixed MEthods Analysis

MODIFICATION APPROVAL DATE: 03/19/2015

CURRENT EXPIRATION DATE: 12/9/15

LEVEL OF RISK: ☒ Minimal ☐ More than Minimal   **TYPE OF REVIEW:** ☒ Expedited ☐ Convened

APPROVAL: Your protocol modification request dated 3/19/15 is **approved** as presented. If applicable, your modified consent document(s), bearing the IRB approval stamp with current expiration date, is being sent to you via campus mail or U.S. Postal Service unless you have made other arrangements. Please use the updated stamped consent document(s) as your copy master(s).

COMMENTS: NONE

Lorraine Schmertzing   *3/19/15*

Lorraine Schmertzing, IRB Chair   Date

Thank you for submitting a continuation request.
Please direct questions to irb@valdosta.edu or 229-259-5045.

Rev: 12.13.12

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Consent Form for Instructors (Interview)

VALDOSTA STATE UNIVERSITY
Consent to Participate in Research

You are being asked to allow your students to participate in a research project entitled "An Investigation of Student Collaborative Summary Writing in Three Modes of Instructional Strategies." This research project is being conducted by Sarah Lashley, a student in the department of Curriculum, Leadership, and Technology at Valdosta State University. The researcher will explain to you in detail the purpose of the project, the procedures to be used, and the potential benefits and possible risks of participation prior to the research. You may also ask the researcher any questions you have to help you understand this project and your possible participation in it. A basic explanation of the research is given below. Please read this carefully and discuss with the researcher any questions you may have. The University asks that you give your signed agreement if you wish to participate in this research project.

Purpose of the Research: The purpose of the research project is to determine the effectiveness of three modes of instructional strategies. One group of classes will locate main ideas to write summaries while two groups of students will use a strategy called the GIST method to create summaries. Students will work collaboratively on a wiki or in groups with pen and paper.

Procedures: As an instructor in this research project, you will teach summarization lessons according to lesson plans and scripts that the researcher provide. You will follow them exactly, and let the researcher know ahead of time of any questions you have or clarification that may be needed. As students work collaboratively during the lessons, you will maintain a reflective journal. Prompts will be provided, but you are free to add other information, and should also include any observations you've made that you consider important. You will be interviewed about the strategy your lass used. The interview will be videotaped, but you may request to stop the recording and/or interview at any point.

Possible Risks or Discomfort: Although there are no known risks associated with these research procedures, it is not always possible to identify all potential risks of participating in a research study. However, the University has taken reasonable safeguards to minimize potential but unknown risks. If at any point, you become uncomfortable during the interview/videoing process, you may stop the process. By agreeing to participate in this research project, you are not waiving any rights that you may have against Valdosta State University for injury resulting from negligence of the University or its researchers.

Potential Benefits: Although you may not benefit directly from this research, your participation will help the researcher gain additional understanding of effectiveness of three different modes of instructional strategies. Knowledge gained may contribute to addressing gaps in literacy instruction.

Costs and Compensation: There are no costs to you and there is no compensation (no money, gifts, or services) for your participation in this research project.

Assurance of Confidentiality: Valdosta State University and the researcher will keep your information confidential to the extent allowed by law. Members of the Institutional Review Board (IRB), a university committee charged with reviewing research to ensure the rights and welfare of research participants, may be given access to your confidential information. Your reflections will be locked in a closet and only seen by the researcher and, as necessary, the researcher's dissertation committee members and VSU's IRB Review Board. Your name will be removed from the reflections and pseudonyms will be used in the report of findings.

Voluntary Participation: Your decision to participate in this research project is entirely voluntary. If you agree now to participate and change your mind later, you are free to leave the study. Your decision not to participate at all or to stop participating at any time in the future will not have any effect on any rights you have or any services you are otherwise entitled to from Valdosta State University. You may skip any questions that you do not want to answer. Should you decide to withdraw after data collection is complete, your information will be deleted from the database and will not be included in research results.

Information Contacts:
Questions regarding the purpose or procedures of the research should be directed to Sarah Lashley at 229-546-7187 or salashley@valdosta.edu. This study has been approved by the Valdosta State University Institutional Review Board (IRB) for the Protection of Human Research Participants. The IRB, a university committee established by Federal law, is responsible for protecting the rights and welfare of research participants. If you have concerns or questions about your rights as a research participant, you may contact the IRB Administrator at 229-333-7837 or irb@valdosta.edu.

Agreement to Participate: The research project and my role in it have been explained to me, and my questions have been answered to my satisfaction. I agree to participate in this study. By signing this form, I am indicating that I am 18 years of age or older. I have received a copy of this consent form.

I would like to receive a copy of the results of this study: _____ Yes _____ No

Mailing Address: _____

E-mail Address: _____

_____
Printed Name of Participant

_____
Signature of Participant   Date

_____
Signature of Person Obtaining Consent   Date

This research project has been approved by the Valdosta State University Institutional Review Board for the Protection of Human Research Participants through the date noted below:

Valdosta State University
Consent to Participate in Research – Page 2 of 2

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VALDOSTA STATE UNIVERSITY
Parent/Guardian Permission for Child's/Ward's Participation in Research

You are being asked to allow your child (or ward) to participate in a research project entitled "An Investigation of Student Collaborative Summary Writing in Three Modes of Instructional Strategies." This research project is being conducted by Sarah Lashley, a student in Curriculum, Leadership, and Technology at Valdosta State University. The researcher has explained to you in detail the purpose of the project, the procedures to be used, and the potential benefits and possible risks to your child (or ward). You may ask the researcher any questions you have to help you understand this study and your child's (or ward's) possible participation in it. A basic explanation of the research is given below. From this point on in this form, the term "child" is used for either a child or a ward. Please read the remainder of this form carefully and ask the researcher any questions you may have. The University asks that you give your signed permission if you will allow your child to participate in this research project.

Purpose of the Research: This study involves research. The purpose of the study is to determine the effectiveness of three modes of summary writing strategies. One group of classes will locate main ideas to write summaries while two groups of students will use a strategy called the GIST method to create summaries. Students will work collaboratively on a wiki or in groups with pen and paper.

Procedures: Your child will collaborate with classmates to complete summaries on nonfiction texts. Some students will be taught specific strategies and others will not. Some students will post their wikis online, and some students will not. All students must learn to write summaries and will be required to write summaries in class. However, your child's participation in the research will not be graded, and assessments will not count against students. Participation in the research summary strategies and activities is voluntary. Students will take pre-, midpoint, and post assessments and take part in instruction and practice over a five-week period. Students who do not participate will still be expected to write summaries for class, but may do so independently using the method of his/her choice. Students will be interviewed about the strategy his/her class used. The interview will be videotaped, but students may request to stop the recording and/or interview at any point.

Possible Risks or Discomfort: Although there are no known risks to your child associated with these research procedures, it is not always possible to identify all potential risks of participating in a research study. However, the University has taken reasonable safeguards to minimize potential but unknown risks. If at any point, the student becomes uncomfortable during the interview/videoing process, he or she may stop the process. By granting permission for your child to participate in this research project, you are not waiving any rights that you or your child may have against Valdosta State University for injury resulting from negligence of the University or its researchers.

Potential Benefits: Your child may benefit from participation in this study through enhanced summary writing skills. His/her participation will help the researcher gain additional understanding of the effectiveness of three different modes of summary writing strategies. Knowledge gained may contribute to addressing gaps in literacy instruction.

Costs and Compensation: There are no costs to you or your child and there is no compensation (no money, gifts, or services) for your child's participation in this research project.

Assurance of Confidentiality: Valdosta State University and the researcher will keep your child's information confidential to the extent allowed by law. Members of the Institutional Review Board (IRB), a university committee charged with reviewing research to ensure the rights and welfare of research participants, may be given access to your child's confidential information. Any private information will be seen only by the ELA teacher, the researcher, and the VSU IRB committee assisting with the research. All summaries and information along with identifiable information will be locked in a closet until being reviewed. Reported data will not be associated with students by name or class. If your student's work is discussed in the report, pseudonyms will be used. The data collected from your child will be stored in a safe environment, and burned after five years.

Voluntary Participation: Your decision to allow your child to participate in this research project is entirely voluntary. If you agree now to allow your child to participate and you change your mind later, you are free to withdraw your child from the study at that time. By not allowing your child to participate in this study or by withdrawing him/her from the study before the research is complete, you are not giving up any rights that you or your child have or any services to which you or your child are otherwise entitled to from Valdosta State University. If you decide to withdraw the child from the study after data collection is complete, the child's information will be deleted from the database and will not be included in research results.

Information Contacts:
Questions regarding the purpose or procedures of the research should be directed to Sarah Lashley at 229-219-3234 or sarahlashley@lowndes.k12.ga.us. This study has been approved by the Valdosta State University Institutional Review Board (IRB) for the Protection of Human Research Participants. The IRB, a university committee established by Federal law, is responsible for protecting the rights and welfare of research participants. If you have concerns or questions about your child's rights as a research participant, you may contact the IRB Administrator at 229-333-7837 or irb@valdosta.edu.

Agreement to Participate: The research project and my child's (or ward's) role in it have been explained to me, and my questions have been answered to my satisfaction. I grant permission for my child to participate in this study. By signing this form, I am indicating that I am either the custodial parent or legal guardian of the child. I have received a copy of this permission form.

I would like to receive a copy of the results of this study: _____ Yes _____ No

Mailing Address: _____

e-mail Address: _____

_____
Printed Name of Child/Ward

_____
Printed Name of Parent/Guardian

This research project has been approved by the Valdosta State University Institutional Review Board for the Protection of Human Research Participants through the date noted below:

_____   _____
Signature of Parent/Guardian   Date

_____   _____
Signature of Person Obtaining Consent   Date

Valdosta State University
Permission for Child Participation in Research – Page 2 of 2

Parent/Guardian's Initials: _____

Consent Form for Minors

I am willing to take part in the study called "An Investigation of Student Collaborative Summary Writing in Three Modes of Instructional Strategies". I understand that the researcher, Sarah Lashley, from Valdosta State University is hoping to determine the effectiveness of three modes of instructional strategies. I understand that I participate in lessons led by my teacher and write summaries both with a group of other students and by myself. I will also be interviewed about the strategy my class used, and I understand that the interview will be videoed. This study will take place at Pine Grove Middle School and should take about 5 weeks of my time.

I am taking part because I want to. I have been told that I can stop at any time, and if I do not like a question, I do not have to answer it. If I become uncomfortable during the interview, I may ask to stop the interview and/or videoing. No one will know which summaries are mine, except for my teacher, the researcher, and IF NEEDED, a few VSU faculty members. I understand that if my summary is discussed in a written report, different name will be used.

Name _____

Signature _____

Date: _____

Age: _____

APPENDIX F:

Permission to Adapt Rubric from Frey, Fisher, and Hernandez (2003)

Sun 5/4/2014 9:25 AM
To:
nfrey@mail.sdsu.edu;
dfisher@mail.edsu.edu;

Hello,

    My name is Sarah Lashley, and I am a graduate student at Valdosta State University in Georgia. I am currently planning a dissertation on the use of the GIST strategy in two different settings, and I very much liked the rubric you created and displayed in the article ""What's the Gist?" Summary Writing for Struggling Adolescent Writers." I am writing for permission to use this rubric with adaptation for my study. I appreciate your consideration in this matter.

Thank you for your time,
Sarah Lashley

Nancy Frey <nfrey@mail.sdsu.edu>
Sun 5/4/2014 12:13 PM
Inbox
To:
Sarah A Lashley;

Cc:
dfisher@mail.edsu.edu;
You forwarded this message on 5/4/2014 3:17 PM.

Yes, of course! We look forward to hearing of your findings!

Nancy and Doug

APPENDIX G:

Original and Adapted Rubrics

Original rubric from Frey, Fisher, and Hernandez (2003): Rubric for Assessing Summary
Writing

Name: _____Summary Title:_____

Date: _____ Period: _____

	4	3	2	1
Length	6-8 sentences	9 sentences	10 sentences	11+ sentences
Accuracy	All statements accurate and verified by story	Most statements accurate and verified by story	Some statements cite outside information or opinions	Most statements cite outside information or opinions
Paraphrasing	No more than 4 words in a row taken directly from story	One sentence contains more than 4 words in a row taken directly from story	Two sentences contain more than 4 words in a row taken directly from story	3+ sentences contain more than 4 words in a row taken directly from story
Focus	Summary consists of main idea and important details only	Summary contains main idea and some minor details	Summary contains main idea and only minor details	Main idea of story is not discussed
Conventions	No more than one punctuation, grammar, or spelling error	2-3 punctuation, grammar, or spelling errors	4-5 punctuation, grammar, or spelling errors	6+ punctuation, grammar, or spelling errors

Overall grade: _____
Comments:

Adapted Rubric for Assessing Summary Writing

Name: _____Summary Title:_____
Date: _____Period:_____

	4	3	2	1
Length	Approximately 15 words per section in text, and entire summary is an appropriate length for the text length.	Some sections contain significantly more or less than 15 words, but the entire summary is an appropriate length for the text length.	Most sections contain significantly more or less than 15 words, and entire summary is not an appropriate length for the text length.	Each section contains significantly more or less than 15 words as a summary of each section, so that the entire summary is not an appropriate length for the text length.
Accuracy	All statements accurate and verified by text	Most statements accurate and verified by text	Some statements cite outside information or opinions	Most statements cite outside information or opinions
Paraphrasing	No more than 4 words in a row taken directly from text	One sentence contains more than 4 words in a row taken directly from text	Two sentences contain more than 4 words in a row taken directly from text	3+ sentences contain more than 4 words in a row taken directly from text
Focus	Summary consists of main ideas and important details only	Summary contains many main ideas and some minor details	Summary contains few main ideas and mostly minor details	Main ideas of text are not discussed
Conventions	No more than one punctuation, grammar, or spelling error	2-3 punctuation, grammar, or spelling errors	4-5 punctuation, grammar, or spelling errors	6+ punctuation, grammar, or spelling errors

Overall grade: _____

APPENDIX H:

Permission from Readworks.org to use Nonfiction Passages

Checking In

Sarah A Lashley
Mon 8/11/2014 12:18 PM
Thank you so much for all of your help!

← REPLY   ← REPLY ALL   → FORWARD   •••

mark as unread

Kathy Bloomfield <kathy@readworks.org>
Mon 8/11/2014 10:32 AM

To: Sarah A Lashley;

• You replied on 8/11/2014 12:18 PM.

Sarah,

ReadWorks has given Sarah A. Lashley the permission to use the following passages in your doctoral thesis:

- Will Human Life on Earth Come to an End
- Water: A Give and Take
- Valley Nuts
- Sir Isaac Newton and Lebron James
- Lightning and Fire

- Weather Air Patterns
- Origins of the Internet
- The Eco Pyramid

You agree to use the texts as they are written, retain the header, footers and copyright information on the passages but have the permission to remove the question sets/answer keys. These passages can not be used for commercial purposes nor can you authorize the use of them to anyone else without our permission.

We wish you luck with your thesis. Please let me know if you have additional questions.
Regards,
Kathy

APPENDIX I:

Wiki Page Screenshot

APPENDIX J:

Weekly Overview of Summary Instruction Lessons

Strategies		2nd week, lesson 1	2nd week, lesson 2		4th week, lesson 1	4th week, lesson 2	
Tradition-al	PRE–Instruction Summary Assess-ment

Informat-ional passage @ Lexile level 1080: "Will Human Life on Earth Come to an End?"

Teacher is monitor only | -Whole Class instruction/example using traditional strategy

-Summary with small group (3-4 students) | -Whole Class instruction review: using traditional strategy

-Summary with small group | Mid-Point Summary Assess-ment

Informat-ional passage @ Lexile level 1080: "Lightning and Fire"

Teacher is monitor only | -Whole Class instruction review: using traditional strategy

-Summary with small group | -Whole Class instruction review: using traditional strategy

-Summary with small group | POST – Instruction Summary Assess-ment

Informat-ional passage @ Lexile level 1080: "The Eco Pyramid"

Teacher is monitor only |
| GIST ONLY | | -Whole Class instruction/ example using GIST strategy

-Summary with small group (3-4 students) generated via face-to-face | -Whole Class instruction review: using GIST strategy

-Summary with small group (3-4 students) generated via | | -Whole Class instruction review: using GIST strategy

-Summary with small group (3-4 students) generated via face-to-face discussion | -Whole Class instruction review: using GIST strategy

-Summary with small group (3-4 students) generated via | |

		discussion n	face-to-face discussion on		face-to-face discussion on	
GIST + Technology		-Whole Class instruction/example using GIST strategy -Group summary: -Students will read the passage linked from the wiki and generate a summary generated via group discussion on class wiki	-Whole Class instruction review: using GIST strategy -Group summary: -Students will read the passage linked from the wiki and generate a summary generated via group discussion on class wiki	-Whole Class instruction review: using GIST strategy -Group Summary: -Students will read the passage linked from the wiki and generate a summary generated via group discussion on class wiki	-Whole Class instruction review: using GIST strategy -Group Summary: -Students will read the passage linked from the wiki and generate a summary generated via group discussion on class wiki	
Partici-pants		For the entire 5 week period, there should be approximately 210 students involved total, split into Groups A, B, and C, dependent upon instructor.				

Reading selection		Informational passages @ Lexile level 1050: "Valley Nuts" and "Water: A Give and Take"	Informational passage @ Lexile level 1050: "Sir Isaac Newton and Lebron James"		Informational passage @ Lexile level 1050: "Weather Air Patterns"	Informational passage @ Lexile level 1050: "Origins of the Internet"	

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APPENDIX K:

Collaborative Traditional Lesson Plans

Group: Collaborative Traditional	Unit: Summary Writing
	Lesson 1
Introduction:	Objectives:
Question and discussion to assess prior knowledge	-Students will be able to define and explain what a summary is.
• *"What is a summary?"*	
• *"How much of a text should be included in a summary?"*	-With help from peers, students will be able to write an effective and economical summary of a given text with 70% accuracy.
Main Content / Guided Practice:	Teacher Role:
• Pass out sample text and discuss main ideas: *"What is a main idea?"* *"How do you know if a piece of information is a main idea?"*	Leader/Guide during intro and main content Monitor/Facilitator during Student Practice
• As a class, read the entire text.	
• As a class, determine what the main ideas of the text are: *"What do you think are some of the main ideas from this passage?"*	Resources: -paper -Pens/pencils -2 informational texts – one for guided practice - "Animal Influence,"
• List discussion-generated main ideas on the board, and as a class, weed through the suggestions and form one paragraph to summarize the text.	one for student practice – "Water – A Give and Take"
• Discussion – *"What makes this paragraph a good summary of the text?"*	
Student Practice / Assessment:	Assessment Method:
-Summary with small group (3-4 students):	-Formative Assessment
-Students will read the passage provided. Together, students will apply the same method – finding main ideas – to create one group-generated paragraph summary of the text. Students should discuss as	-Assessed with rubric

they walk through the summary what information is important and what is not in order to create a summary that everyone agrees is accurate.	
Group: Collaborative Traditional	Unit: Summary Writing Lesson 2
Introduction: • Review meaning of summary: *"What did we say a summary is?"*	Objectives: -Students will be able to define and explain how to write a summary. -With help from peers, students will be able to write an effective and economical summary of a given text with 75% accuracy.
Guided Practice: • Review of summaries and how to identify main ideas • Provide feedback from Lesson One's group summaries • Discuss overall class strengths and weaknesses, remediating specific skills based on weaknesses	Teacher Role: Leader/Guide during intro and guided practice Monitor/Facilitator during Main Content Resources: -paper -Pens/pencils -1 informational text: "Sir Isaac Newton and Lebron James"
Main Content: Student Practice / Assessment: -Summary with small group (3-4 students): -Students will read the passage provided. Together, students will apply the same method – finding main ideas – to create one group-generated paragraph summary of the text. Students should discuss as they walk through the summary what information is important and what is not in order to create a summary that everyone agrees is accurate.	Assessment Method: -Formative Assessment -Assessed with rubric

Group: Collaborative Traditional	Unit: Summary Writing Lesson 3
Introduction: • Review meaning of summary	Objectives: -Students will be able to define and explain how to write summaries. -With help from peers, students will be able to write an effective and economical summary of a given text with 80% accuracy.
Guided Practice: • Provide feedback from Lesson Two's group summaries • Discuss overall class strengths and weaknesses, remediating specific skills based on weaknesses	Teacher Role: Leader/Guide during intro and guided practice Monitor/Facilitator during Main Content Resources: -paper -Pens/pencils -1 informational text: "Focus on ADHD"
Main Content: Student Practice / Assessment: -Summary with small group (3-4 students): --Students will read the passage provided. Together, students will apply the same method – finding main ideas – to create one group-generated paragraph summary of the text. Students should discuss as they walk through the summary what information is important and what is not in order to create a summary that everyone agrees is accurate.	Assessment Method: -Formative Assessment -Assessed with rubric
Group: Collaborative Traditional	Unit: Summary Writing Lesson 4
Introduction: • Review meaning of the word and strategy: summary	Objectives: -Students will be able to explain how to write a summary. -With help from peers, students will be able to write an effective and economical

	summary of a given text with 85% accuracy.
Guided Practice: • Provide feedback from Lesson Three's group summaries • Discuss overall class strengths and weaknesses, remediating specific skills based on weaknesses as needed	Teacher Role: Leader/Guide during intro and guided practice Monitor/Facilitator during Main Content Resources: -Paper -Pens/pencils -1 informational text: "Coast Beast"
MAIN CONTENT: Student Practice / Assessment: -Summary with small group (3-4 students): -Students will read the passage provided. Together, students will apply the same method – finding main ideas – to create one group-generated paragraph summary of the text. Students should discuss as they walk through the summary what information is important and what is not in order to create a summary that everyone agrees is accurate.	Assessment Method: -Formative Assessment -Assessed with rubric

APPENDIX L:

Collaborative GIST Only Lesson Plans

Group: Collaborative GIST Only	Unit: Summary Writing Lesson 1
Introduction: Question and discussion to assess prior knowledge - *"What is a summary?"* *"How much of a text should be included in a summary?"*	Objectives: -Students will be able to define and explain the GIST strategy for summary writing. -With help from peers, students will be able to write an effective and economical summary of a given text with 70% accuracy.

Main Content / Guided Practice:
"Today, we will be talking about a way to summarize text. This is called the GIST strategy. GIST means the main point. When we summarize a text, we should be telling the main point of the text in as few words as possible while still getting the main point across."
   - Pass out sample text and discuss chunking:
"As you read any text, a good strategy is to chunk the text. That just means to divide it up into chunks. When you do this, you will find paragraphs that fit together or are on the same topic that those paragraphs will form one chunk."   - As a class, read the entire text.   - As a class, determine where to divide the text so that there are three sections:
"Where do you think we could divide this text?"   - Re-read section one, and, as a class, determine the most important information and create a 15-word summary.   - Re-read section two, and, as a class, determine the most important information from the previous gist summary and the new information. Together, create a 15-word summary that covers both section one and two.
	Teacher Role:
	-Leader/Guide during intro and main content
	 -Monitor/Facilitator during Student Practice
	
	Resources:
	-paper
	-Pens/pencils
	-2 informational texts –
	    one for guided practice - "Animal Influence,"
	    one for student practice – "Water – A Give and Take"

• Re-read section three, and, as a class, determine the most important information from the previous gist summary and the new information. Together, create a 15-word summary that covers all three sections of the text. • Class discussion – *"Is this an accurate summary of the text? Why/Why not?"*	
Student Practice / Assessment: -Summary with small group (3-4 students): -Students will read the passage provided. Together, students will apply the GIST strategy of summarizing the text and create one summary to turn in for the group. Students should discuss as they walk through the summary what information is important and what is not in order to create a summary that everyone agrees is accurate. This will be done in the following manner: Each student will be responsible for a section of the text. After reading section one, student A from the group will create a GIST summary. The group will talk about the summary and agree/disagree as to the accuracy of the summary. Based on the discussion, student A may decide to revise the original GIST summary. The group will then read sections one and two, and student B will write a new GIST summary based on both sections. Again, the group will discuss the summary followed by an opportunity for the student to revise. This pattern will go on until the entire text has been summarized.	Assessment Method: -Formative Assessment -Assessed with rubric
Group: Collaborative GIST Only	Unit: Summary Writing Lesson 2
Introduction: • Review meaning of the word GIST *"Who remembers what the word GIST means?"*	Objectives: -Students will be able to explain the GIST strategy for summary writing. -With help from peers, students will be able to write an effective and economical

- Guide students as necessary to the meaning of the word.	summary of a given text with 75% accuracy.
Guided Practice: • Review of GIST strategy and how to appropriately chunk text: "Remember that first we need to chunk – or divide – the text. Then, we want to summarize with only 20 words if possible as we read section by section." • Provide feedback from Lesson One's group summaries • Discuss overall class strengths and weaknesses, remediating specific skills based on weaknesses	Teacher Role: Leader/Guide during intro and guided practice Monitor/Facilitator during Main Content Resources: -paper -Pens/pencils -1 informational text: "Sir Isaac Newton and Lebron James"
Main Content: Student Practice / Assessment: -Summary with small group (3-4 students): -Students will read the passage provided. Together, students will apply the GIST strategy of summarizing the text and create one summary to turn in for the group. Students should discuss as they walk through the summary what information is important and what is not in order to create a summary that everyone agrees is accurate. This will be done in the following manner: Each student will be responsible for a section of the text. After reading section one, student A from the group will create a GIST summary. The group will talk about the summary and agree/disagree as to the accuracy of the summary. Based on the discussion, student A may decide to revise the original GIST summary. The group will then read sections one and two, and student B will write a new GIST summary based on both sections. Again, the group will discuss the summary followed by an	Assessment Method: -Formative Assessment -Assessed with rubric

opportunity for the student to revise. This pattern will go on until the entire text has been summarized.	
Group: Collaborative GIST Only	Unit: Summary Writing Lesson 3
Introduction: Review meaning of the word and strategy: GIST *"Can someone remind the class what the word gist means?* *Who remembers what the GIST strategy is? As in, what steps do we take when we are using GIST to summarize?"*	Objectives: -Students will be able to define and explain the GIST strategy for summary writing. -With help from peers, students will be able to write an effective and economical summary of a given text with 80% accuracy.
Guided Practice: - Review of GIST strategy and how to appropriately chunk text: "Remember that first we need to chunk – or divide – the text. Then, we want to summarize with only 20 words if possible as we read section by section." - Provide feedback from Lesson Two's group summaries - Discuss overall class strengths and weaknesses, remediating specific skills based on weaknesses	Teacher Role: Leader/Guide during intro and guided practice Monitor/Facilitator during Main Content Resources: -paper -Pens/pencils -1 informational text: "Focus on ADHD"
Main Content: Student Practice / Assessment: -Summary with small group (3-4 students): -Students will read the passage provided. Together, students will apply the GIST strategy of summarizing the text and create one summary to turn in for the group. Students should discuss as they walk through the summary what information is important and what is not in order to create a summary that everyone agrees is accurate. This will be done in the following manner: Each student will be responsible	Assessment Method: -Formative Assessment -Assessed with rubric

for a section of the text. After reading section one, student A from the group will create a GIST summary. The group will talk about the summary and agree/disagree as to the accuracy of the summary. Based on the discussion, student A may decide to revise the original GIST summary. The group will then read sections one and two, and student B will write a new GIST summary based on both sections. Again, the group will discuss the summary followed by an opportunity for the student to revise. This pattern will go on until the entire text has been summarized.	
Group: Collaborative GIST Only	Unit: Summary Writing Lesson 4
Introduction: • Review meaning of the word and strategy: GIST *"Can someone remind the class what the word gist means?* *Who remembers what the GIST strategy is? As in, what steps do we take when we are using GIST to summarize?"*	Objectives: -Students will be able to define and explain the GIST strategy for summary writing. -With help from peers, students will be able to write an effective and economical summary of a given text with 85% accuracy.
Guided Practice: • Review of GIST strategy and how to appropriately chunk text: "Remember that first we need to chunk – or divide – the text. Then, we want to summarize with only 20 words if possible as we read section by section." • Provide feedback from Lesson Three's group summaries • Discuss overall class strengths and weaknesses, remediating specific skills based on weaknesses	Teacher Role: Leader/Guide during intro and guided practice Monitor/Facilitator during Main Content Resources: -paper -Pens/pencils -1 informational text: "Coast Beast"
Main Content: Student Practice / Assessment: -Summary with small group (3-4 students):	Assessment Method: -Formative Assessment

-Students will read the passage provided. Together, students will apply the GIST strategy of summarizing the text and create one summary to turn in for the group. Students should discuss as they walk through the summary what information is important and what is not in order to create a summary that everyone agrees is accurate. This will be done in the following manner: Each student will be responsible for a section of the text. After reading section one, student A from the group will create a GIST summary. The group will talk about the summary and agree/disagree as to the accuracy of the summary. Based on the discussion, student A may decide to revise the original GIST summary. The group will then read sections one and two, and student B will write a new GIST summary based on both sections. Again, the group will discuss the summary followed by an opportunity for the student to revise. This pattern will go on until the entire text has been summarized.	-Assessed with rubric

APPENDIX M:

Collaborative GIST with Technology Lesson Plans

Group: Collaborative GIST with Technology	Unit: Summary Writing Lesson 1
Introduction: Question and discussion to assess prior knowledge – · *"What is a summary?"* · *"How much of a text should be included in a summary?"*	Objectives: -Students will be able to define and explain the GIST strategy for summary writing. -With help from peers via a wiki collaborative writing assignment, students will be able to write an effective and economical summary of a given text with 70% accuracy.

Main Content / Guided Practice:
"Today, we will be talking about a way to summarize text. This is called the GIST strategy. GIST means the main point. When we summarize a text, we should be telling the main point of the text in as few words as possible while still getting the main point across."
· Pass out sample text and discuss chunking:
"As you read any text, a good strategy is to chunk the text. That just means to divide it up into chunks. When you do this, you will find paragraphs that fit together or are on the same topic that those paragraphs will form one chunk."
· As a class, read the entire text.
· As a class, determine where to divide the text so that there are three sections:
"Where do you think we could divide this text?"
· Re-read section one, and, as a class, determine the most important information and create a 15-word summary.
· Re-read section two, and, as a class, determine the most important information from the previous gist summary and the new information. Together, create a 15-word summary that covers both section one and two.
· Re-read section three, and, as a class, determine the most important information from the previous gist summary and the
	Teacher Role:
	Leader/Guide during intro and main content
	   Monitor/Facilitator during Student Practice
	Resources:
	-computer access
	-internet access
	-class wiki
	-2 informational texts –
	      one for guided practice -"Animal Influence,"
	      one for student practice – "Water – A Give and Take"
	***Students should NOT be sitting with Group At computers. Groups should be disbursed around the room.

new information. Together, create a 15-word summary that covers all three sections of the text. · Class discussion – *"Is this an accurate summary of the text? Why/Why not?"*	
Student Practice / Assessment: -Summary with small group (3-4 students): -Students will read the passage provided. Students will log in to the wiki and begin to edit their group page for Week 2. Students will apply the GIST strategy of summarizing the text to create one summary, editing and commenting as a means to discuss what information is important and what is not in order to create a summary that everyone agrees is accurate. This will be done in the following manner: Each student will be responsible for a section of the text. After reading section one, student A from the group will post a GIST summary on the group's wiki page. Once the summary is posted, the group members will comment on the page agreeing/disagreeing as to the accuracy of the summary. Based on the comments, student A may revise the original GIST summary. The group will then read sections one and two, and student B will write a new GIST summary based on both sections and student A's original summary. Again, the group will comment on the wiki about the new summary followed by an opportunity for the student to revise. This pattern will go on until the entire text has been summarized and all group members have given input as to the summary's accuracy.	Assessment Method: -Formative Assessment -Assessed with rubric
Group: Collaborative GIST with Technology	Unit: Summary Writing Lesson 2
Introduction: · Review meaning of the word: GIST	Objectives: -Students will be able to explain the GIST strategy for summary writing.

"Who remembers what the word GIST means?" - Guide students as necessary to the meaning of the word.	-With help from peers, students will be able to write an effective and economical summary of a given text with 75% accuracy.
Guided Practice: · Review of GIST strategy and how to appropriately chunk text: "Remember that first we need to chunk – or divide – the text. Then, we want to summarize with only 20 words if possible as we read section by section." · Provide feedback from Lesson One's group summaries · Discuss overall class strengths and weaknesses, remediating specific skills based on weaknesses	Teacher Role: Leader/Guide during intro and guided practice Monitor/Facilitator during Main Content Resources: -computer access -internet access -class wiki -1 informational text: "Sir Isaac Newton and Lebron James" ***Students should NOT be sitting with Group At computers. Groups should be disbursed around the room.
MAIN CONTENT: Student Practice / Assessment: -Summary with small group (3-4 students): -Students will read the passage provided. Students will log in to the wiki and begin to edit their group page for Week 4. Students will apply the GIST strategy of summarizing the text to create one summary, editing and commenting as a means to discuss what information is important and what is not in order to create a summary that everyone agrees is accurate. This will be done in the following manner: Each student will be responsible for a section of the text. After reading section one, student A from the group will post a GIST summary on the group's wiki page. Once the summary is posted, the group members will comment on the page agreeing/disagreeing as to the accuracy of the summary. Based on the comments, student A may revise the original GIST summary. The group will then read sections one and two, and student B will write a new GIST summary	Assessment Method: -Formative Assessment -Assessed with rubric

based on both sections and student A's original summary. Again, the group will comment on the wiki about the new summary followed by an opportunity for the student to revise. This pattern will go on until the entire text has been summarized and all group members have given input as to the summary's accuracy.	
Group: Collaborative GIST with Technology	Unit: Summary Writing Lesson 3

Introduction:
· Review meaning of the word and strategy: GIST
     "Can someone remind the class what the word gist means?
     Who remembers what the GIST strategy is? As in, what steps do we take when we are using GIST to summarize?"
	Objectives:
	-Students will be able to explain the GIST strategy for summary writing.
	-With help from peers, students will be able to write an effective and economical summary of a given text with 80% accuracy.

Guided Practice: · Provide feedback from Lesson Two's group summaries · Discuss overall class strengths and weaknesses, remediating specific skills based on weaknesses as needed	Teacher Role: Leader/Guide during intro and guided practice Monitor/Facilitator during Main Content Resources: -computer access -internet access -class wiki -1 informational text: "Focus on ADHD" ***Students should NOT be sitting with Group At computers. Groups should be disbursed around the room.
MAIN CONTENT: Student Practice / Assessment: -Summary with small group (3-4 students): -Students will read the passage provided. Students will log in to the wiki and begin to edit their group page for Week 6. Students will apply the GIST strategy of summarizing the text to create one summary, editing and commenting as a means to discuss what information is	Assessment Method: -Formative Assessment -Assessed with rubric

important and what is not in order to create a summary that everyone agrees is accurate. This will be done in the following manner: Each student will be responsible for a section of the text. After reading section one, student A from the group will post a GIST summary on the group's wiki page. Once the summary is posted, the group members will comment on the page agreeing/disagreeing as to the accuracy of the summary. Based on the comments, student A may revise the original GIST summary. The group will then read sections one and two, and student B will write a new GIST summary based on both sections and student A's original summary. Again, the group will comment on the wiki about the new summary followed by an opportunity for the student to revise. This pattern will go on until the entire text has been summarized and all group members have given input as to the summary's accuracy.	
Group: Collaborative GIST with Technology	Unit: Summary Writing Lesson 4

Introduction:
· Review meaning of the word and strategy: GIST
     "Can someone remind the class what the word gist means?
     Who remembers what the GIST strategy is? As in, what steps do we take when we are using GIST to summarize?"
	Objectives:
	-Students will be able to explain the GIST strategy for summary writing.
	-With help from peers, students will be able to write an effective and economical summary of a given text with 85% accuracy.

Guided Practice: · Provide feedback from Lesson Three's group summaries · Discuss overall class strengths and weaknesses, remediating specific skills based on weaknesses as needed	Teacher Role: Leader/Guide during intro and guided practice Monitor/Facilitator during Main Content Resources: -computer access -internet access -class wiki -1 informational text: "Coast Beast"

	***Students should NOT be sitting with Group At computers. Groups should be disbursed around the room.
MAIN CONTENT: Student Practice / Assessment: -Summary with small group (3-4 students): -Students will read the passage provided. Students will log in to the wiki and begin to edit their group page for Week 8. Students will apply the GIST strategy of summarizing the text to create one summary, editing and commenting as a means to discuss what information is important and what is not in order to create a summary that everyone agrees is accurate. This will be done in the following manner: Each student will be responsible for a section of the text. After reading section one, student A from the group will post a GIST summary on the group's wiki page. Once the summary is posted, the group members will comment on the page agreeing/disagreeing as to the accuracy of the summary. Based on the comments, student A may revise the original GIST summary. The group will then read sections one and two, and student B will write a new GIST summary based on both sections and student A's original summary. Again, the group will comment on the wiki about the new summary followed by an opportunity for the student to revise. This pattern will go on until the entire text has been summarized and all group members have given input as to the summary's accuracy.	Assessment Method: -Formative Assessment -Assessed with rubric

APPENDIX N:

Teacher Reflective Journals

Group B Teacher Journal

The following questions are a guide only. Include any thoughts/experiences you deem appropriate and/or relevant:

Pre Test:
      My students had obviously forgotten the logistics of summarization. They used quotations, paraphrased, and even plagiarized.

Lesson One:
How well did students seem to understand the strategy for summarizing?
      The students seemed to understand the strategy as I worked through the process with them. They were slow to understand at first, but seemed to follow as the lesson continued.

What concerns/reservations do you have, if any?
      I am concerned with the time it will take my students to complete the assignments. My students took a bit of time to understand the process with my guidance, so I am concerned with how much time it will take my students in their groups.

How did most students seem to respond to the strategy?
      My students were very hesitant at first. Many thought the strategy was confusing at first. However, they seemed to understand the strategy a bit more after guidance.

When placed into small groups for collaborative summaries, how well did students work together?
      The students spent a lot of time talking to each other about what they were supposed to do. After getting students back on task, they seemed to have a better understanding of what they needed to do.

How productive were the conversations regarding the summaries?
      The conversations were not very productive. Students wanted to rush to finish theirs instead of working as a group.

How do you think student summaries will rate on the rubric? (i.e. Did students seem to produce summaries that will score high grades? Or did summaries seem sub- par?)
      I think summaries will not receive a very good grade. I believe my students were more worried about finishing in a hurry than producing a good product.

Were there any observations that seemed significant that you have not already discussed? If so, what would you like to add?

Not that I can think of.

Lessons Two - Four:
What strengths/weaknesses were addressed during whole-class instruction?

2. It was hard for students to continue with the same flow throughout the summary, as well as determining the main ideas of each chunk.

3. Students still struggled with consistent flow through their summaries. They also are doing better with their lengths.

4. Students are doing better with their fluidity, but still need work. The lengths of their summaries need to improve.

Did students seem to take the feedback into account when creating a summary for today's text?

2. Students seemed to focus on making the lengths 15-20 words per chunk.

3. Students worked more on the flow of ideas and making the chunk lengths appropriate.

4. Students seemed to focus on the smaller details (spelling, punctuation, etc.) as well as length and flow of ideas.

When placed into small groups for collaborative summaries, how well did students work together?

2. Students were still hesitant, but seemed to work better as they understood their specific job.

3. I had to redirect focus a few times, but students are continually improving on their team skills.

4. Because students have gotten more confident in the GIST strategy, their teamwork has improved significantly, as well as their writing of the summary.

How productive were the conversations regarding the summaries?

2. Students seemed confused, making the conversations unproductive. Students argued a lot about what they needed to be doing.

3. Students understood the information better, therefore the process of writing the summary seemed to be a lot easier. The conversations seemed to be more productive.

4. Students discussed the content and wrote their summaries a lot faster than previously. This allowed this to finish faster, but also caused them to forget to read back over the summary to make sure the ideas flowed.

How do you think student summaries will rate on the rubric? (i.e. Did students seem to produce summaries that will score high grades? Or did summaries seem sub- par?)

2. I believe the students will show progress.

3. The length and flow of ideas should improve from the first and second summary.

4. By glancing over what they were working on as they worked in groups, the conversations seemed to be more on track than during previous lessons. I believe the summaries will show great improvement across the board!

Were there any observations that seemed significant that you have not already discussed? If so, what would you like to add?
Not that I can think of.

Group C Teacher Journal

The following questions are a guide only. Include any thoughts/experiences you deem appropriate and/or relevant:

Pre Test:
        During the pre-test, I got questions on length of summary and use of quotes. Students are unsure of summarization and summarization strategies in general.

Lesson One:
How well did students seem to understand the strategy for summarizing?
        Students understand the GIST strategy. However, they were not able to complete the summary on the wiki. The students were overwhelmed in trying to take turns editing and making comments without talking.

What concerns/reservations do you have, if any?
        The wiki will not work for my classes. Students were overwhelmed because they could not talk about where to chunk the text. Otherwise, time is my only concern.

How did most students seem to respond to the strategy?
        Students like the GIST strategy, but they hated working on the wiki. Some of my students do not like participating in a group. I see students give feedback without any changes being made.

When placed into small groups for collaborative summaries, how well did students work together?
        The students worked well together when they can talk to one another. Some groups argued over changes that needed to be made. For instance, one low student would not listen/change his 15-20 word summary after discussing errors with a higher level student.

How productive were the conversations regarding the summaries?
        The students were more focused on finishing their own summary than helping one group member combine the individual chucked summaries.

How do you think student summaries will rate on the rubric? (i.e. Did students seem to produce summaries that will score high grades? Or did summaries seem sub- par?)
        I think summaries will be sub-par. Students are going to struggle with the flow of ideas between individual summaries.

Were there any observations that seemed significant that you have not already discussed? If so, what would you like to add?

I can't think of anything.

What strengths/weaknesses were addressed during whole-class instruction?
2. Students struggled with the flow of ideas, identifying the overall main idea, and the length.
3. Students struggled with the flow of ideas. However, they did much better on limiting their individual summaries to 15-20 words.
4. Students needed to work on grammar and punctuation errors. Students were doing much better with the flow of ideas.

Did students seem to take the feedback into account when creating a summary for today's text?
2. Students worked better on making their individual ideas flow.
3. Students worked on reading the summary after each student wrote a chunk to ensure better flow
4. Individually, students asked how to spell words and wanted me to read their chunks. However, they did not do a good job at peer editing for mistakes.

When placed into small groups for collaborative summaries, how well did students work together?
2. Students seemed to work better in their groups the second time around.
3. Students are working better within the groups. Now, they know what they have to do, and they work to get it done.
4. Students worked the best on the last group practice. They seemed to understand the importance of individual work to get the entire summary done accurately.

How productive were the conversations regarding the summaries?
2. They were productive; however, some students did not help combine the summaries.
3. Students focus more on getting their individual chunks done versus collaborating on how to make them flow and peer editing.
4. Students still were more concerned with their individual chunks than the entire summary as a whole. Conversations were more about where to chunk and how to split up the chunks than the summary itself.

How do you think student summaries will rate on the rubric? (i.e. Did students seem to produce summaries that will score high grades? Or did summaries seem sub- par?)
2. I think there will be improvement from the first summaries.
3. I think the unity section should increase.
4. I think these should be the best summaries thus far because there was less technical language, and students have been practicing and improving.

Were there any observations that seemed significant that you have not already discussed? If so, what would you like to add?

No.

APPENDIX O:

Teacher Interview Transcripts

Group B Teacher Interview Transcript

Q: What were the benefits and challenges of teaching with GIST?

A: I think the most challenging thing I faced was (pause) umm definitely presenting a completely new strategy, well, actually concept to my students. Most of what I teach my students have heard before or been introduced to (pause) but this was a totally new concept to them. Another challenging thing was getting them to understand that they can use multiple strategies to summarize texts. (long pause) They could not get past the fact that they already knew how to summarize, and did not understand why they needed to use a different strategy to summarize...umm...the benefits were that because they knew how to summarize, they understood what the end result should be. If their end product was (pause) just as long or used the same wording as the original text, using their prior knowledge they knew they had not used the summarization strategy correctly.

Q: How well did students seem to understand the GIST strategy?

A: Umm (laughs)... it depends on which day you are referring to! At first my students were umm (pause) very...umm...hesitant. Once we worked through the texts together, they seemed to get the gist (laughs) of the strategy. By the last lesson and final assessment, they seemed to understand the strategy and what was expected of them.

Q: Was the strategy effective?

A: Umm...I believe so. After looking at the final results, I would have to say that most students improved in summarizing the texts.

Q: How could it be improved?

A: Umm one thing that I wish I could have done was guide my students more than just one day... If they could have seen me model it a bit longer, I believe their understanding and success in using the strategy would significantly improve.

Q: Was it effective for getting students interested?
A: (pause) Umm many of the texts seemed to be umm (pause) "over their heads." I think because they were not able to understand and comprehend the texts completely, umm it hindered their ability to use the GIST strategy correctly. It took them longer to understand the text, so their time to layout their summarization was cut very short.

Q: How do you think working as a group for lessons impacted student performance on individual assessments?
A: Umm (pause) I think working in the group worked well for some and not as well for others. I saw that many students did not want a low grade on the assignments, so they ended up doing other member's work. Because of this, umm once the individual assessments we completed, many students did not do well on them because they did not receive great practice.

Q: What type/types of growth do you think students experienced through this unit?
A: I think my students grew in their understanding of summarizing, using the GIST strategy, but also grew in their ability to work in groups.

Group C Teacher Interview Transcript

Q: What were the benefits and challenges of teaching with GIST?

A: I think the GIST helped students understand summarizing better. Students were able to locate main ideas more accurately. (pause) But, it was a challenge for students to chunk the material correctly. Some students struggled with comprehending the passage as well, which led to other issues in their summaries.

Q: How well did students seem to understand the GIST strategy?

A: Students understood locating the main ideas greatly. (pause) I think they progressed over time with this.

Q: Was the strategy effective?

A: Um...I think the strategy was pretty effective for most students.

Q: How could it be improved?

A: I think the interest level could be improved by finding more engaging passages to read. And I think starting with easier reading comprehension passages would be better to slowly (pause) progress into the GIST strategy. (pause) I think talking in a Group But having students write their own summary would help also.

Q: Was it effective for getting students interested?

A: Um…I don't think it was very effective for getting students interested. My students were not very interested in the reading passages. (pause) When they became uninterested, they stopped reading for understanding, which affected their summaries.

Q: How do you think working as a group for lessons impacted student performance on individual assessments?

A: I think working in groups helped some students, but it hurt others. (pause) Low kids got help from the higher students in the group, but the higher kids felt like they had to carry the majority of the weight, like with [a student's name].

Q: What type/types of growth do you think students experienced through this unit?

A: I think students grew in terms of working in groups effectively (pause) because they had to work with the same group for such a long period of time. I would say their stamina for reading was increased. Um.. they also improved on identifying main ideas.

Q: How did the technology affect student performance on lesson 1? Why did you feel that it was not in students' best interest to continue using technology for the remainder of the summaries?

A: Technology negatively affected students performance on the first lesson. Students did not like only being able to communicate via the computer. (pause) It was a challenge for students to help one another by simply making comments. They kept wanting to talk. Students expressed concerns for the amount of time it took. Also, some students would not make changes even after comments were made. I felt students would not benefit using technology for this unit. I was worried about the time constraint. I also hated them not being able to communicate at all. I worried about students understanding the material when communication was so limited.

APPENDIX P:

Student Interview Transcripts

Student Interviews

Group 1 - high achiever: *13 yr old African American female*

I: [Student's name], you were in my class, so you had the finding main ideas

strategy. So, when we did the lessons, think about the lessons you did with your group

members. How well do you think you understood the strategy you used when you wrote

your summaries?

R: I think I understood the strategy pretty well with finding the main idea and then

finding all the key details that we had to use, so I think it worked out really well.

I: Okay. How do you think working with a group for the lessons affected your work on

the individual summaries because you had 2 lessons with your Group And then a mid-

point assessment, then 2 more lessons with your group then your post assessment. So

how do you think the GROUP work affected your individual summaries?

R: I think the group work had a good effect because it allowed me to, like, see things

from different points of view, so I could, um, and then, also, finding more details that

maybe I would have left out, so it, like, helped me to really look.

I: Okay. The next question is how do you think technology would have affected your

summaries. By that, I mean, if instead of working with your partners 'talking it out,' how

do you think communicating through technology would have affected it?

R: umm...like talking through Google docs?

I: Yes, talking only through the Google Docs or a wiki versus being able to 'talk it out' in class.

R: I think it would have had, like, sort of a bad effect because when you're talking to someone in person, you have, like, more details and like little comments that you wouldn't really have when you were talking through technology, and also, it allows you to look at something together, like, when you're sitting with them, it allows you to look at something together so you're really connected more.

I: You guys always use technology! You are constantly texting each other even if the person is across the room from you instead of talking. So how is this different?

R: I think that it is better to talk to someone in person when you are working on something together. When you're talking in person, you can add in little comments or quickly change something you said. Talking through tech can also cause confusion between two people, so I think talking in person helps people understand each other better.

I: Okay. That is all of the questions I have for you. Do you have anything to add that you thought was interesting or helpful or not helpful about the way we did our summaries?

R: I thought it was helpful because it really, like, doing the groupwork, um, like, (pause) bringing everyone's ideas together (pause) really, like, gave more details, and just….yeah… (trails off and looks to interviewer)

I: So did you like the group work?

R: Yes. (smiles)

I: Thank you for letting me interview you.

Group 1 - low achiever: *13 yr old Caucasian male*

I: [Student's name], you were in my group, so we found main ideas to help us write our summaries. How well do you think you understood the strategy you used when writing your summaries?

R: Good because it helped us find information where if we did it by ourself, we might not have understood it and when we had our partners, we had more than one opinion to find the answers.

I: Okay, but what about the strategy itself? Like, looking for main ideas?

R: Yes, that helped me to write my summary.

I: Okay. How do you think the GROUP work affected your individual summaries?

R: I think it helped because if we would've, like it was easier for us 'cause we had more than one person so that if we thought of something and we were confused about it, then we could ask our partners, and they would let us know, like, help us understand it better.

I: Okay, and when you did your individual summaries, how did that - working with a Group Before you did those individual summaries - help you?

R: It helped us, helped me, because I was able to find information better.

I: Okay, and how do you think technology would have affected your summaries. If you communicated through a wiki or a Google Doc or something online versus being able to talk out loud in class?

R: I think it would have been a bad idea because um, if we would've got confused with something, and we weren't there to ASK them, sometimes people don't know what to put into the thing to type enough to ask them.

I: You guys always use technology! You are constantly texting each other even if the person is across the room from you instead of talking. So how is this different?

R: Because we would not be able to explain the question and answer to each other so we understand it.

I: Okay, so they don't...are you saying they don't, maybe they don't know how to word what they're trying to ask?

R: Yeah.

I: Okay, do you have anything else to add that you thought was interesting or helpful or not helpful your summary lessons?

R: That maybe later on, if we do this again by ourself, without our partners, we'll probably know how to do it!

I: Okay. Thank you.

R: You're welcome!

Group 2 - High achiever: *13-year old Hispanic female*

I: [Student's name], you were in the GIST strategy group, so how well do you think you understood this strategy?

R: Um....I don't really remember this, but it was easy to me, but, like, when I had to work on it by myself for the essay [post-assessments], it was kind of difficult.

I: Okay. You did the two group lessons before a mid-point assessment by yourself, then 2 lessons together then one more by yourself. So how do you think the GROUP lessons affected your individual summaries?

R: It helped me because the people in my group went more into depth than I did. They understood the strategy better, so, like, it kind of helped me when I was writing my own.

I: Alright. How do you think technology would have affected your summaries? If you were only communicating with your group members through technology instead of being able to talk?

R: I think that would've made it worse because, um, we were able to, like, interact with one another, and, like, show each other what we mean by talking.

I: You guys always use technology! You are constantly texting each other even if the person is across the room from you instead of talking. So how is this different?

R: I think that would be a bad thing because using technology is not as much fun as to socialize with the other students.

I: How do you think that having a certain number of words per section affected your summaries? Do you think it made them easier, harder, etc. to write?

R: That was...I didn't like that part 'cause, like, I like to go into detail when I write, so I would've preferred to write more.

I: Alright. That is all I have for you. Do you have anything to add that you thought was interesting or helpful or not helpful?

R: I thought it was cool that we got to do this for you...that we helped with your research.

I: Well, I am very appreciative of you guys participating in it as well. Thank you for your time with the interview also!

Group 2 - low achiever: 13-year old African American female

I: [Student's name], you were in the GIST strategy group, so how well did you understand the GIST strategy?

R: I understand it a lot because we did it.

I: How do you think working with the GROUP for lessons affected your performance on the individual summaries?

R: I think I did better because other people could understand it, and they could help when they read over it, like, tell me what I did wrong in the lessons.

I: Okay. When you did the summaries by yourself, did you think about those lessons?

R: I thought about it when they helped me and how they helped me.

I: Alright. how do you think technology would have affected your summaries? If you were only communicating with your group members through technology instead of being able to talk?

R: Probably….It would probably make it…(pause) better, no, bad because they could (pause). They could like, they couldn't help me in a way they could if they were sitting right in front of me. I like to talk about it.

I: Okay. So here is what...and this is just me asking...you guys always use technology! You are constantly texting each other even if the person is across the room from you instead of talking. (Student smiles). So how is this different?

R: I don't know, because you like...you're having a different conversation. It's not about school or classes...it's kinda, like, funner. But, like, if we're talking about school, I can't like understand it if you're like texting it to me.

I: How do you think that having a certain number of words affected the way you wrote your summaries?

R: I kinda liked it, but at the same time I didn't. Because, like, I like writing, I like write a whole bunch. I don't like writing just a limit.

I: Alright. That is all I have for you. Do you have anything to add that you thought was interesting or helpful or not helpful?

R: No ma'am.

Group 3 - high achiever: 13-year old Asian female

I: [Student's name], you were in [Teacher's name]'s class, and you had the GIST strategy, how well do you think you understood the GIST strategy?

R: Um, I understood it pretty well and it helped me a lot.

I: Okay. How do you think working with a group for the lessons, s because you had 2 lessons with your Group And then a mid-point assessment by yourself, then 2 more lessons with your group, then one more test by yourself. So how do you think the GROUP work affected your performance on the summaries you did by yourself?

R: Um, I, (pause) honestly, I didn't really like working with my group, and it was really confusing for me, but it helped me in the way that I had to be the one that had to use the strategy the most, um, because my group didn't really understand it. So, I had to use it more than they did, so when I was doing it individually, I liked it better and I knew what to do.

I: Okay. How do you think technology would have affected your summaries? If you had only been allowed to discuss with your group through technology like Google Docs chat option or comments on a wiki or comments on a Google Doc instead of 'talking it out.' How do you think that would have affected your summaries?

R: I think they would have been a lot worse than what they were. It's better to communicate with your Group And peers personally, rather than through technology so you can get them to understand your message better.

I: You guys always use technology! You are constantly texting each other even if the person is across the room from you instead of talking. So how is this different?

R: For me… My grades are a lot more important than talking to my friends about gossip. So if I wanted a good grade on something, I would probably want to talk face-to-face, just so I knew I was getting the right information. Its different when I'm talking to my friends through text because the meaning can go different ways when I'm not talking about school related things.

I: How do you think having a certain number of words - you had to have 15 words per section - how do you think this affected your summaries? Do you think it made them easier, harder, etc. and Why?

R: I think it made it harder because I had to limit the amount of what I had to write, and I'm usually better at writing when I can write freely, so I think it was harder.

I: Okay. That is all of the questions I have for you, but is there anything you would like to add that you thought was interesting or difficult or helpful about the GIST strategy?

R: (SHAKES HEAD 'NO')

I: Okay; Thank you!

Group 3 - low achiever: 13-year old Caucasian Male

I: [Student's name], you were in [Teacher's name]'s class, so you had the GIST strategy, and you...the first lesson, did you try to use technology?

R: (Shakes head) no

I: Okay, so how well do you think you understood the strategy you used when you wrote your summaries, the GIST strategy?

R: Well, when we were writing, I thought I understood it okay, 'cause, when I was writing it, I could think of the words, what to say, (pause) and what to write.

I: Okay. How do you think working with a group for the lessons, when you did the two group lessons before and after your mid-point assessment, affected your work on the individual summaries because you had 2 lessons with your Group And then a mid-point assessment by yourself, then 2 lessons together then one more test by yourself. So how do you think the GROUP work affected your individual summaries on the tests?

R: I liked it, working in groups, because if i needed help on something, I could just look at them and ask a question.

I: Okay, and how do you think that being able to get that help with them in the lessons helped you when you had to do it by yourself?

R: If I did it by myself without the group, I wouldn't know what to do on it because they helped me on most of it.

I: Okay, so when they helped you, how did that impact your summaries you did on your own?

R: It helped me know what to do on them.

I: Okay. The next question is how do you think technology would have affected your summaries.

R: It would've helped a little bit cause I could've went on the computer and searched questions that I didn't know.

I: Okay. For communication with your group members, do you think it would have helped? Why?

R: I think it would have helped cause i'm a little slow on things and my group members could help me out if i needed it.

I: You are constantly texting each other even if the person is across the room from you instead of talking. So how would using technology for this be different?

R: You can still talk to your group with the technology, so not too different.

I: How do you think having a certain number of words - you had to have 15 words for each section of the text - how do you think this affected your summaries? Do you think it made them easier, harder, etc. to write?

R: I think it affected it pretty good because it helped me on writing more than I would. (pause) Easier.

I: Okay. That is all of the questions I have for you. Do you have anything to add that you thought was interesting or helpful or not helpful, different about the way we did our summaries?

R: (SHAKES HEAD 'NO')

I: Okay; Thank you!